

The NATION'S SCHOOLS

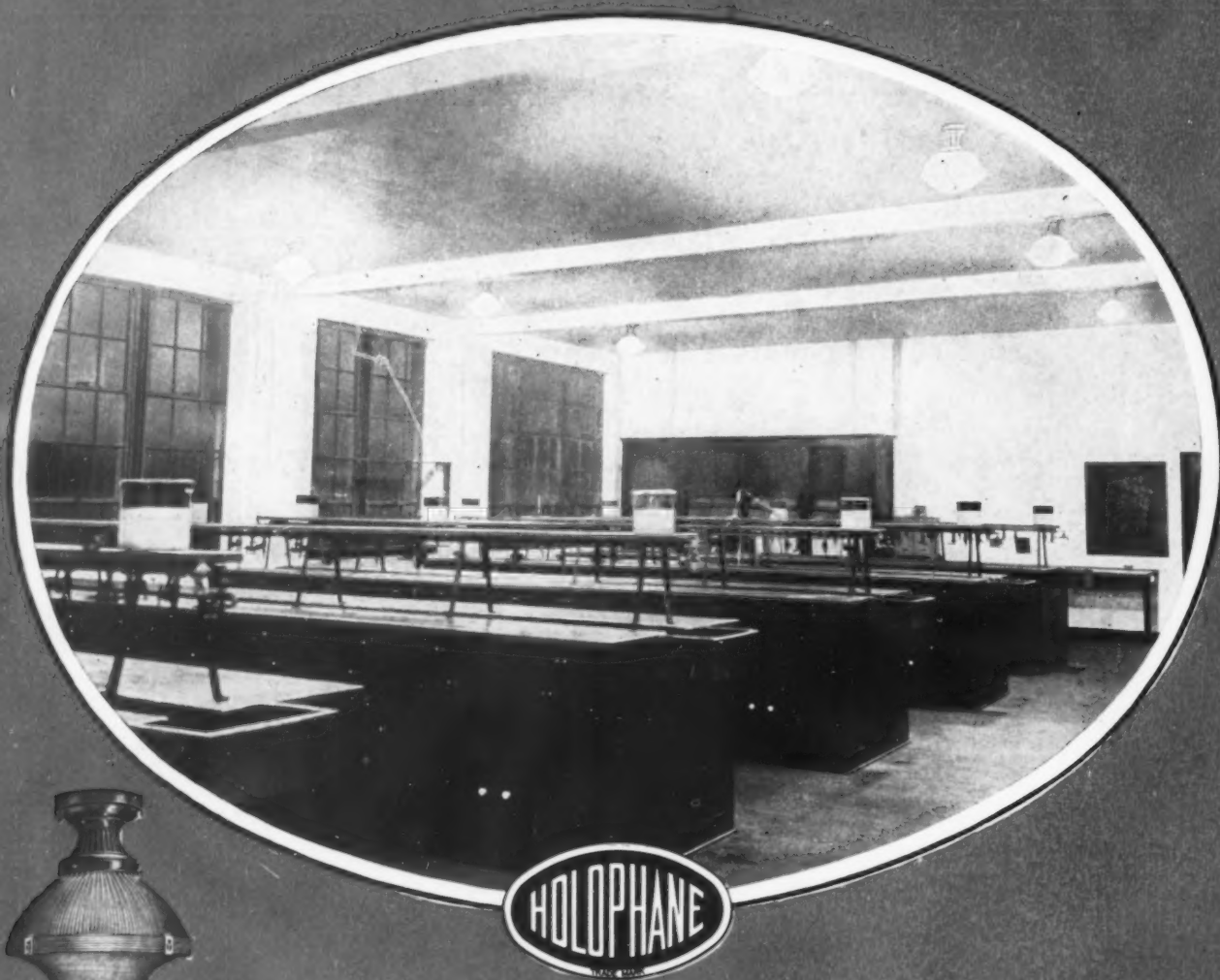
DEVOTED TO THE APPLICATION OF
RESEARCH TO THE BUILDING, EQUIPMENT
AND ADMINISTRATION OF SCHOOLS

VOL. V
No. 1

JANUARY
1930



Published by THE NATION'S SCHOOLS PUBLISHING CO., Chicago.



THE UNIT

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THE LIGHTING RESULT

PLANNED LIGHTING

WITH HOLOPHANE SPECIFICS

FOR LABORATORIES
WRITE FOR BOOKLET NO. 344A

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Happy, Healthy, Alert School Children

Scholastic records and health records reach a new high peak when children are provided with air that is mild, clean, free from drafts and distracting noise.

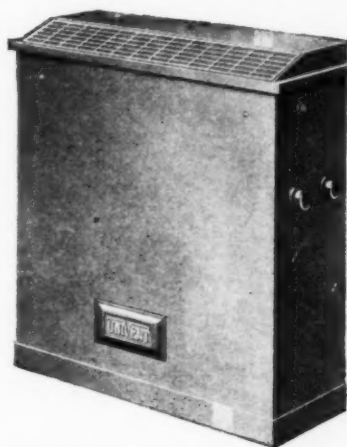
This is the duty of the Univent.

Regardless of wind, snow or storm, the Univent draws a constant supply of air from out-of-doors, cleans it, warms it to a comfortable temperature and distributes it uniformly throughout the room so that every child

is equally benefited. In operation it is even more simple than opening a window.

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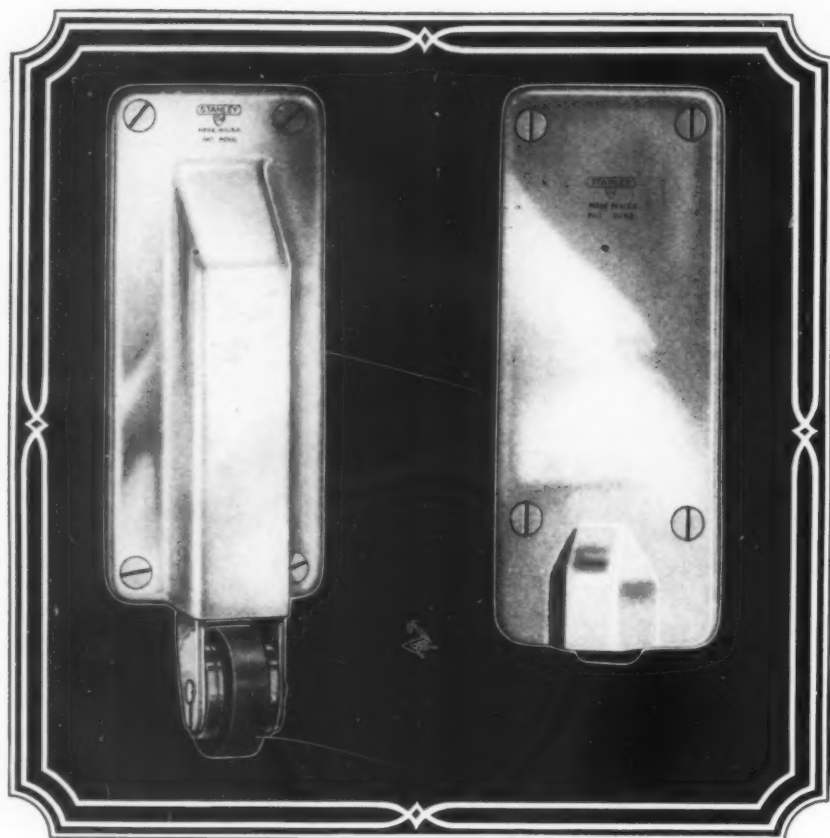
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Surface Type
No. 453

Recommended for
doors now in use,
lacking means of
door control.

Mortise Type
No. 454

Recommended for
new construction.

A New Principle in Door Control for Schools

TO PERMIT positive control of classroom doors and to prevent their slamming, Stanley offers two new Friction Roller Door Holders.

Absolutely silent in operation, these new Door Holders are designed to exert a pressure on the floor sufficient to prevent the wind from slamming the door shut, but light enough to cause no inconvenience in opening or closing the door. The door is held opened as desired.

Already this new equipment has been welcomed by school executives, especially as it permits the door to stand open in any position for ventilation and at the same time assures privacy for each classroom.

Made in two types. Mortise Type No. 454 is recommended for new construction, Surface Type No. 453 for doors now in use lacking proper means of control.

Complete information on this improved equipment will be sent upon request.

THE STANLEY WORKS
New Britain, Conn.

Doors can be left
partly open for
ventilation with-
out the annoy-
ance of slamming.



STANLEY HARDWARE



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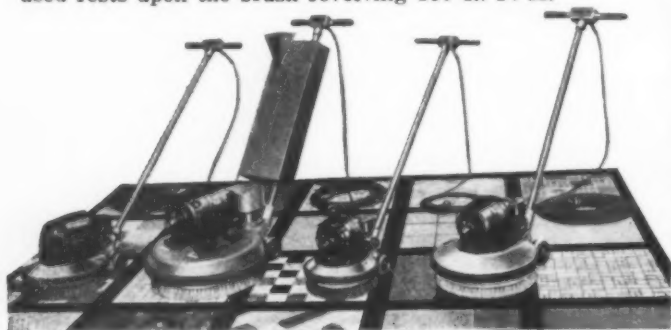
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HILD

Electrically Operated

FLOOR MACHINE

USES The Hild Floor Machine does five things. It will **SCRUB** floors spotlessly clean. **APPLY** liquid or paste wax. **POLISH** waxed floors. **SCRUB** off varnish and **SANDPAPER**. In operation all the weight of machine used rests upon the brush revolving 150 R. P. M.



SPECIFICATIONS

	"B"	Model Number	"D"
Pressure on brush (in operation).....	45 lbs.	55 lbs.	75 lbs.
Weight of machine	45 lbs.	55 lbs.	75 lbs.
Length, rubber covered cable.....	40 ft.	40 ft.	45 ft.
Diameter of brushes	11"	13"	15"
Revolutions of brush per minute.....	150	150	150
Motor (continuous heavy duty).....	1/4 H.P.	1/4 H.P.	1/2 H.P.
Height, floor to top of motor.....	11"	11"	14 1/2"

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WITT Cans last longer—because they are made better.

Only best grade heavy-gauge prime steel is used.

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Guaranteed to outlast 3 to 5 ordinary cans.

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Building Better Students and Worthier Citizens in Kansas City Schools

VOCATIONAL training and practical arts have won a recognized place in modern education. The old fashioned thought in education was to stress the academic and cultural courses of language, history and science in the abstract. But educators today, while not losing sight of the value of academic courses, realize that the first requirement of an education is to equip the student to meet life. As far as possible, they want students to step from their classes into the business of living as naturally as possible. They want to eliminate the "shock years"—when the student must readjust his school-learned knowledge to the world as it really is.

The device that bridges the gap between the academic and the practical—is the shop. And educators find that this is more than a mere bridge. Shop courses serve as an incentive to students. Young boys, fairly overflowing with life and energy, require an outlet that is not afforded by the academic courses. Actual school records show that scholastic standings in academic courses have been raised with the introduction of shop courses.

In the Public Schools of Kansas City, as in many other cities—students are thrilled by the whirl of Wallace Woodworking Machinery. They are delighted with the keen cutting band saw, the tilting arbor circular saw, the smooth cutting jointer, the lathe and other Wallace Machines that convert raw lumber into countless useful articles for the delight and instruction of tomorrow's citizens. In Wallace Machines, there is safety—each machine being thoroughly guarded. And they are not big mill machines, they are cabinet shop machines which boys may operate with ease and convenience.

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Chicago, Ill.

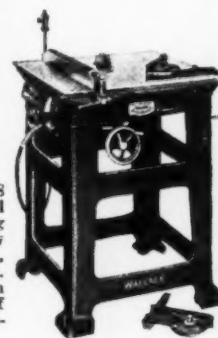
"We have been using Wallace Woodworking Machines in our schools for the past four years and find them to be satisfactory. We find them particularly adaptable to schools. They are very well constructed and do excellent work.

"We also wish to express our appreciation of the quality of the service rendered us and the help that we have had in learning the details of the construction of these machines."

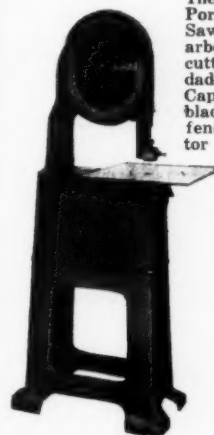
Other School Directors everywhere, are equally enthusiastic about Wallace Machines. Investigate them now!

Safe Instruction with WALLACE Machines

Students stand naturally as they work at Wallace Machines. There is no strain. Wallace Machines are used in industry—more than 40,000 are at work establishing new records of speed, efficiency and accuracy. Yet they are not big, cumbersome mill equipment. They are cabinet making machines that fit school woodworking needs. Portable and driven direct from the electric light socket. Send the coupon for complete catalog.

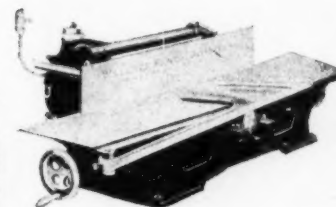


The Wallace No. 8 Portable Universal Saw has a tilting arbor. Will do heavy cutting up to 2 1/4", dado up to 1" wide. Capacity between blade and cut off fence 12". Direct motor drive.



The Wallace No. 10 Portable 8" Jointer cuts 8" wide, rabbets or bevel cuts 3/4" deep. Direct motor drive. Four high speed steel knives.

The dynamic balancing of the WALLACE Band Saw together with the accuracy of the table assures quick and perfect cutting to the line of the finest of band sawing. Is sufficiently powered to handle heavy stock up to 8" thick. Sixteen inches can be handled between the blade and frame; unlimited capacity right of blade.



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Chicago, Ill.

Please send us your complete catalog describing Wallace Woodworking Machines for school woodshops.

Name
Address
City State.....

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THIS MONTH

In the opening article, Doctor Garlin points out the importance of acquainting the citizens with their schools and offers suggestions for making the findings of school surveys known to the public.

The amazing progress made since 1921 by Philadelphia schools in quality of instruction, health facilities, curriculum revision and school building and equipment is described by Mr. Broome in a well illustrated article on page 25.

Mr. Ullrich, on page 31, tells how Texas is balancing its supply and demand of teachers.

How an Oregon high school has developed its extra-curricular activities and made them a vital feature in the development of its students is the theme of an article by Mr. Brownson on page 37.

Professor Moehlman, in an article on page 61, tells of a parish school that is the outgrowth of a definite educational plan, while Mr. Dunning, in the following article, describes the school and its features from the architect's standpoint.



Modern Equipment for Modern Schools



The Blackboard Multiplex

Multiplex Fixtures can be had with any number of blackboard wings in addition to the standard thumb tack mounting board wings.

Along with modern methods of instruction you find educational institutions adopting equipment that increases teaching efficiency and simplifies the instructor's work.

Modern educational programs, for instance, involve the use of quantities of illustrative material. This, in turn, demands adequate means of displaying the material within the narrow confines of the average classroom. Multiplex Educational Display Equipment serves this purpose ideally.

The material is thumb-tacked to the swinging wings. As the lesson progresses, the instructor turns to the wing that illustrates the point, much like turning the pages of a

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Instructors find that the task of teaching becomes far less irksome and the results are indeed gratifying when Multiplex is part of their classroom equipment.

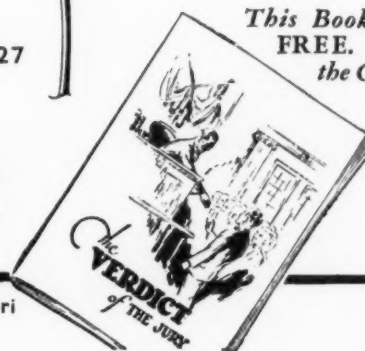
You will be interested in reading the booklet "The Verdict of the Jury" which relates in educators' own words how Multiplex is used. We await the opportunity of sending you a copy. Just clip the coupon and mail

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N. E. A. CONVENTION
Atlantic City ♦ February 22 to 27
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Branches in Principal Cities

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Where "army routine" is applied to the laundry work...

Flat work and cadets' apparel are "double-timed" daily into the United States Military Academy's laundry. And out again with military precision—immaculately washed, perfectly ironed, ready for service in a jiffy.

American Laundry Machinery Company engineers, who helped to install this indispensable academy laundry, will be glad to talk with you about the advantages of a laundry department in your building, under the supervision of your own officials. No obligation, of course.



Where "army routine" is applied to the laundering of flat work and wearing apparel—the dependable "American" laundry at the United States Military Academy, West Point.

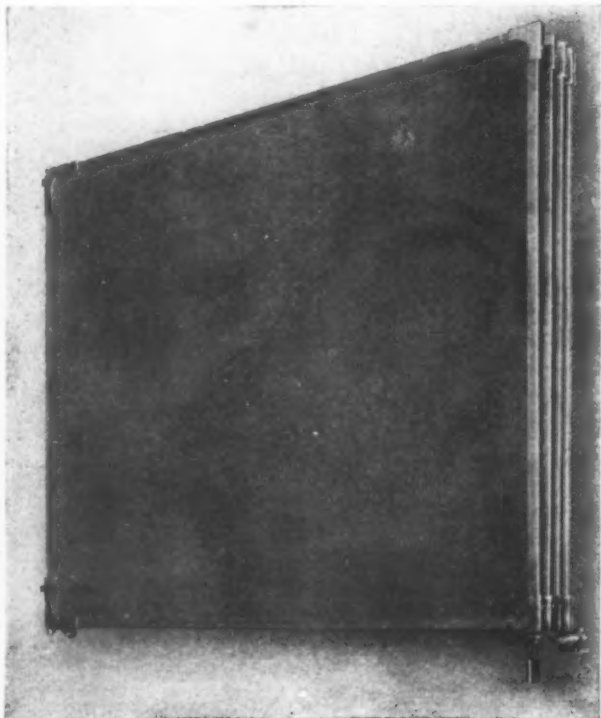
THE AMERICAN LAUNDRY MACHINERY COMPANY, Norwood Station, Cincinnati, Ohio

The Canadian Laundry Machinery Co., Ltd.
47-93 Sterling Road, Toronto 3, Ont., Canada



Agents: British-American Laundry Machinery Co., Ltd.
Underhill St., Camden Town, London, N.W.1, England

"I Don't See How I Ever Got Along Without the Alternator"



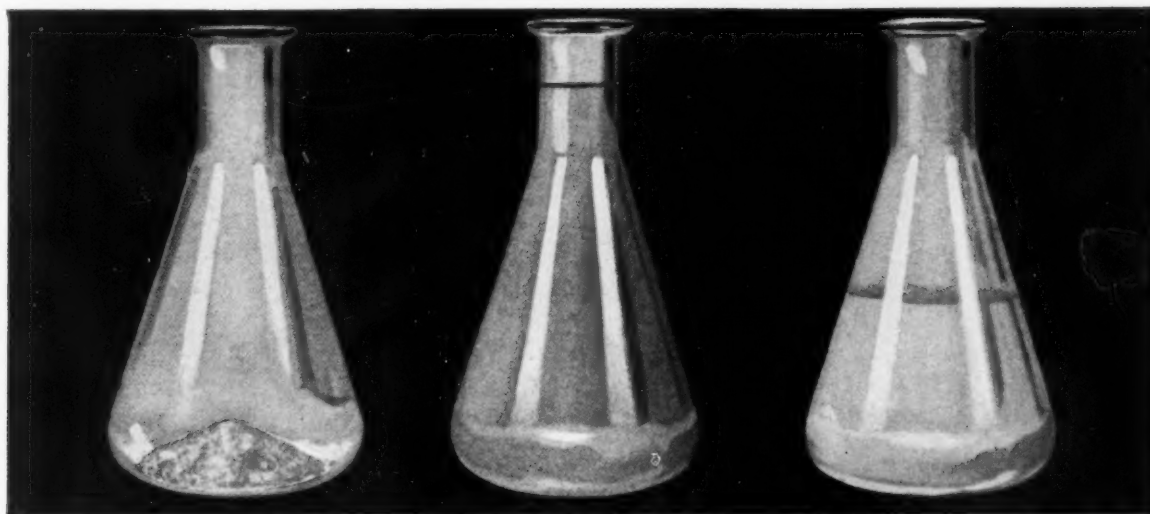
This exclamation from a second grade teacher who spoke as she indicated the huge swinging blackboard book of eight pages.

On every leaf of the Alternator a separate lesson can be prepared in advance. Quizzes can be kept locked within its secret pages until the appointed time for examinations. Material can be flashed on the students. The problem project method of teaching is easy with the Alternator.

There are countless uses for this amazing modern improvement for schoolrooms. Every school can install the Alternator. An Alternator (pipe type) is made especially for old school buildings. And an Alternator (wall type) is manufactured especially for the new building.

Investigate this new kind of blackboard. It saves children's eyesight. It makes teaching more interesting and much easier. It saves teacher's time and energy and it can be adjusted to height. Write for the new Catalog A-4.

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119-123 West Eighth Street, Kansas City, Mo.



Only the color blind can waste Soilax

SOILAX is the only cleaning material with a warning signal against waste—one of its exclusive patented features. Soilax, in its dry state, is a pink powder. Used correctly, it forms a green solution, as shown in the center flask. But when too much is used, the solution turns yellow. Consider what these color signals will mean to you.

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Soilax is so efficacious in cleaning action that one pound is unequivocally guaranteed to do the work of four to six pounds of ordinary cleaning materials.*

Economics Laboratory, Inc.

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Chicago	Des Moines	Indianapolis	Kansas City	New York	Philadelphia
Cincinnati	Detroit			Omaha	Saint Louis



"A LITTLE DOES A LOT"

*Economics Laboratory, Inc., 2694 University Ave., Saint Paul, Minn.

Please send us Soilax as checked, with this understanding:

1. If we are not convinced at the end of 30 days' trial that Soilax is rendering us a superior cleaning result at a saving of 25 to 50% in our present cleaning material bill, or if we in any way feel that Soilax is not all you claim

for it, the demonstration is not to cost us a cent. In these points, we are to be the sole judge. 2. If we are convinced that your claims are justified, we will remit to you the cost of the Soilax according to the prices below.

☐ 125-lb. drum — 13c a lb.

☐ 325-lb. bbl. — 12c a lb.

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Firm..... By.....
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SOILAX is not a soap—it is a patented chemical compound. While exerting an unequalled cleaning action, Soilax is harmless in every respect. Soilax solution may even be dropped into the delicate membranes of the eye without pain or ill effects.

The cleaning action of Soilax is so nearly universal as to eliminate stocking a variety of cleaning materials, and permits the standardization on Soilax for cleaning dishes, glassware, silver, kitchen utensils and equipment, painted surfaces, tile, marble or terrazzo floors, walls, counters and table tops, porcelain tubs, lavatories, and in the laundry.

Soilax has merited the approval of such outstanding hospitals as Boston City Hospital, Boston; Manhattan Eye, Ear, Nose and Throat Hospital, New York; Pennsylvania Hospital, Philadelphia; Glen Lake Sanatorium, Minneapolis; Hotels Statler, Inc.; United Hotels; Eppley Hotels Co.; Drake and Blackstone Hotels, Chicago; Book-Cadillac Hotel, Detroit; Universities of Minnesota, Iowa and Ohio; Miami University; Oxford University; Harvard University; Cornell University; Dartmouth College.

The coupon explains our offer to prove that Soilax will give you better cleaning results and save 25 to 50 per cent.

"Beware of substitutes and infringements."

(240)

ALL SIZES AND STYLES OF TUMBLERS

This is No. 1 of a series of advertisements telling in pictures the story of **HAZEL** Tumblers. The styles here shown are a few of the more popular Restaurant and Hotel Tumblers made in our Clarksburg, West Virginia, factory. We operate ten glass factories and six additional plants for the production of glass accessories.

No. 554½
Extra Heavy
Hotel Tumbler

No. F 1358
Optic Style
Light Weight Tumbler

No. F 376
Optic Barrel-Shape
Hotel Tumbler

No. 358½
Plain Style
Light Weight
Tumbler

No. 552
Straight Hotel
Tumbler

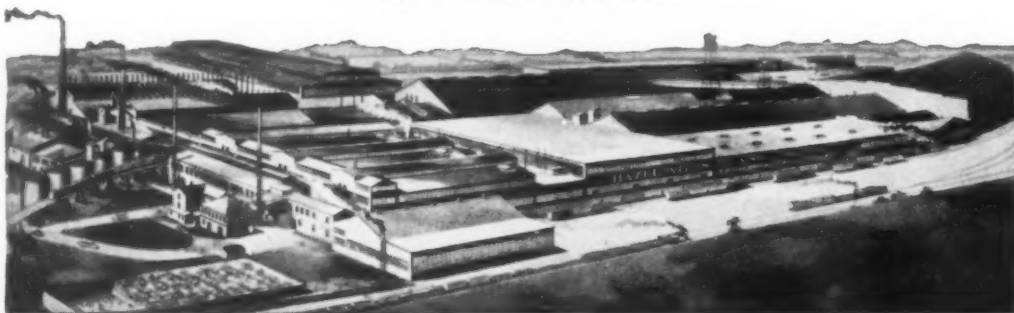
No. 376
Plain Barrel-Shape
Hotel Tumbler

ALL **HAZEL** Tumblers are strongly constructed and clear in color. Glazed edges and smooth bottoms are other features. Our immense production and 100% automatic equipment enable you to purchase **HAZEL** TUMBLERS at no increase in price over other tumblers.

Your Glassware Supply House will serve you with samples and prices of
HAZEL TESTED TUMBLERS

THEY ARE GUARANTEED TO OUTLAST THEM ALL

HAZEL-ATLAS GLASS CO.
WHEELING, W. VA.



WORLD'S · LARGEST · TUMBLER · MANUFACTURERS

Chosen for Chemical Laboratory, Princeton University



All surfaces exposed to corrosive acids (table-tops, fume-hoods, sinks, shelving, etc.) in the new million and a half dollar Chemical Laboratory at Princeton University are of Alberene Stone.

Thus, the latest and most modern laboratory is insured against costly repairs and depreciation. Inherently, Alberene Stone is practically acid and moisture-proof, and highly resistant to stain and flames. Joints, tongued and grooved and cemented with acid-proof cement, are permanently gas and air tight.

We are glad to add the new Chemical Laboratory of Princeton University to the already imposing list of important laboratories which are equipped with Alberene Stone.

Alberene Stone Company, 153 West 23rd St., New York City. Quarries and Mills at Schuyler, Va.

ALBERENE STONE *(A product of the State of Virginia)*
Standard for all laboratory working surfaces.

A Happy New Year!

For Your New Building or Modernization Program

VALLEYCO BLACKBOARDS

Your building or modernization program should include these famous blackboards . . . known everywhere for quality, dependability and reasonable price.

Cinobestos

Long asbestos
fibre and Port-
land cement.



Cinoboard

Wood fibres
specially
treated and
kiln cured.

America's best . . . and most popular.
Specially treated wood; grainless; knot-
less; absolutely waterproof.

JOBBERs: Get set for 1930 . . . write us for most interesting exclusive proposition. Line up NOW for a profitable year.

116-118
East Water St.

The VALLEYCO CO., Inc.

Cincinnati,
Ohio

Five Advantages of the Spencer Cleaning System

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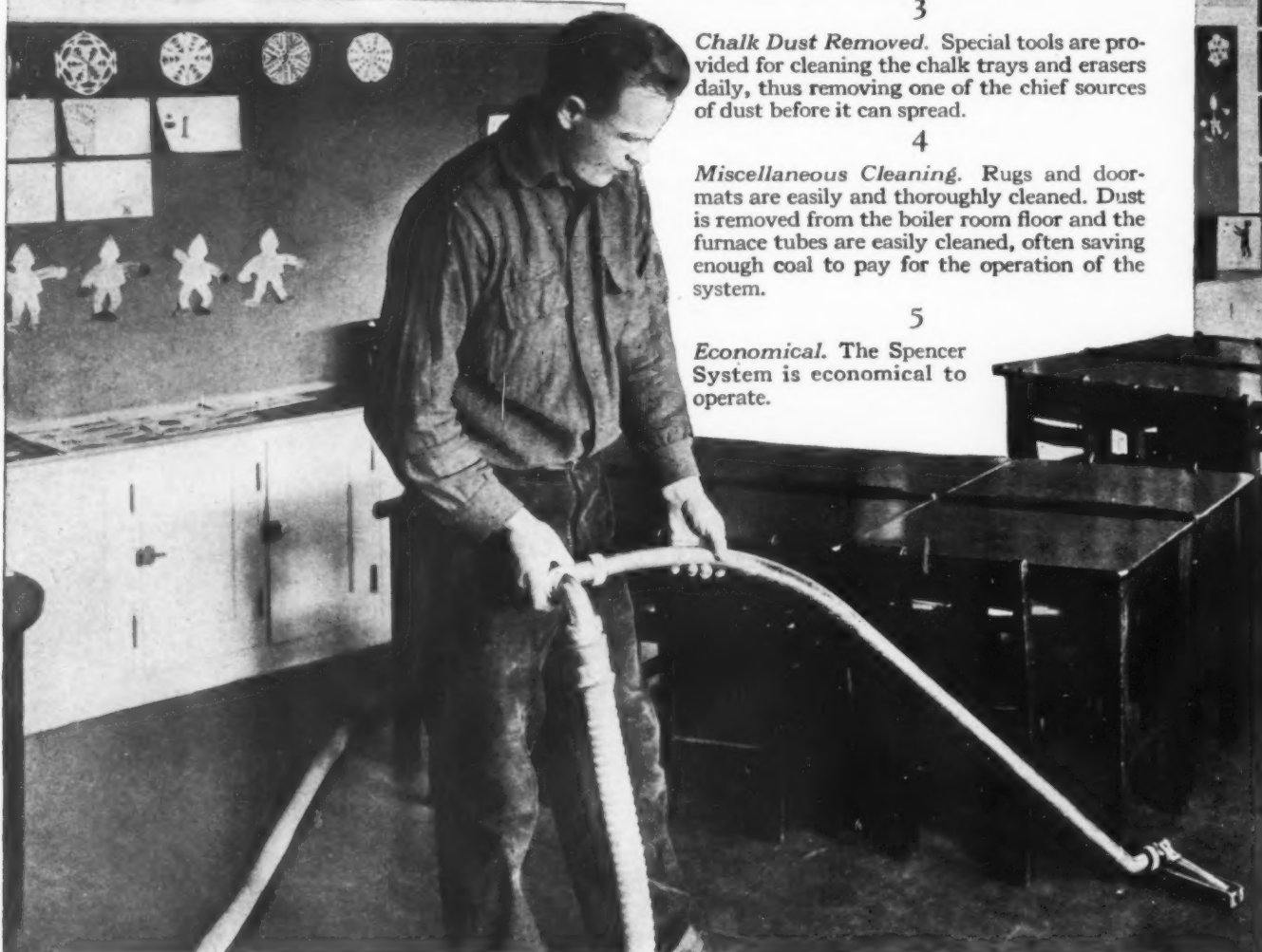
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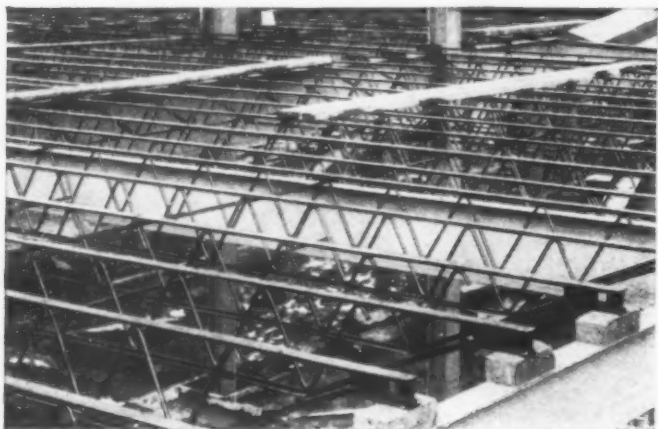
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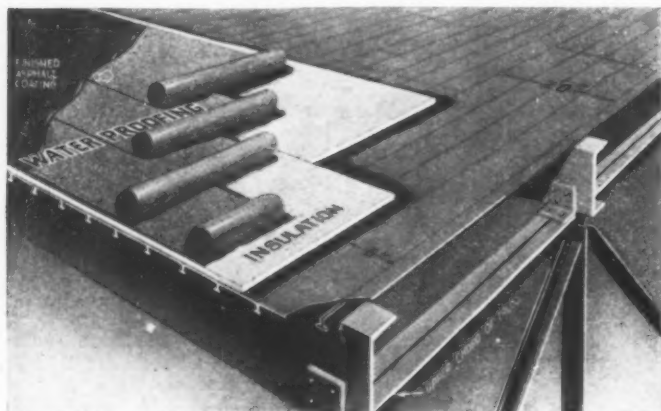


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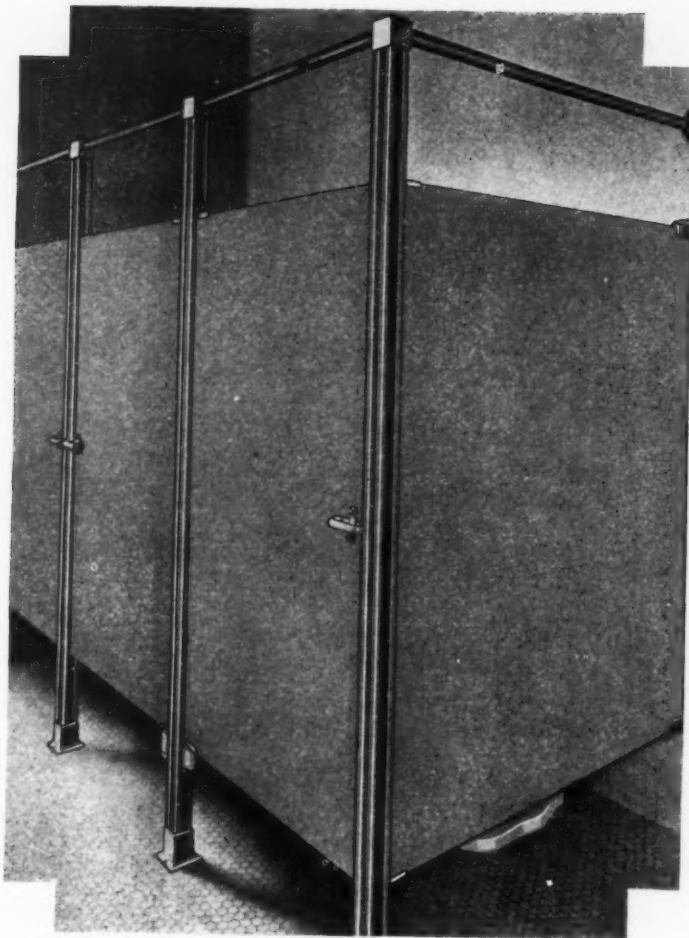
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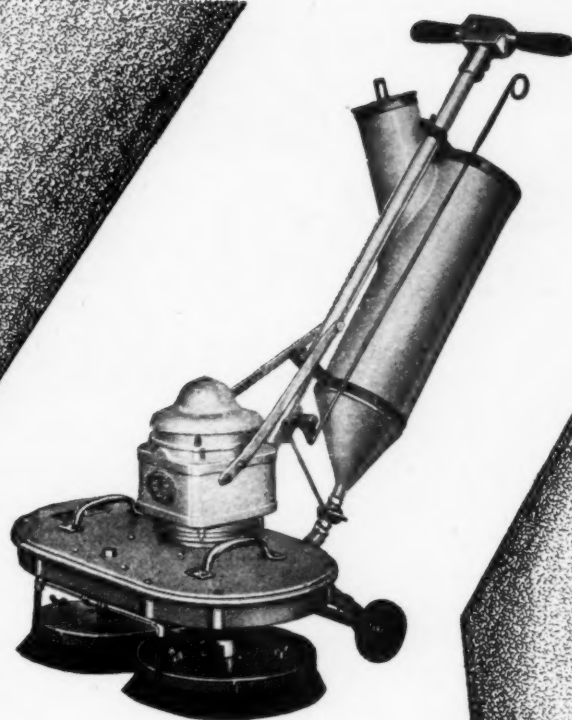
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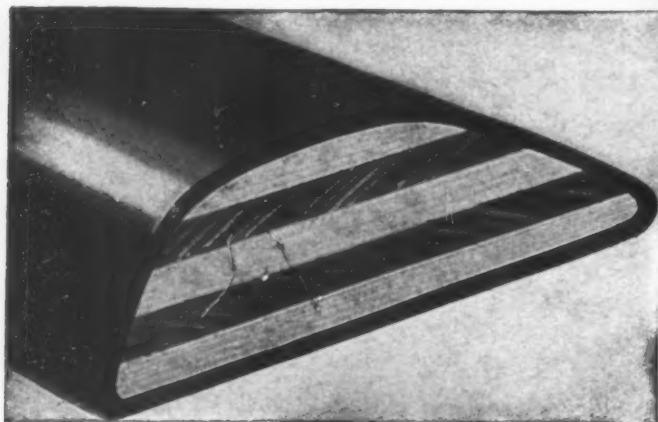
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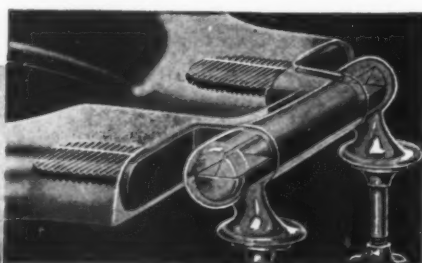
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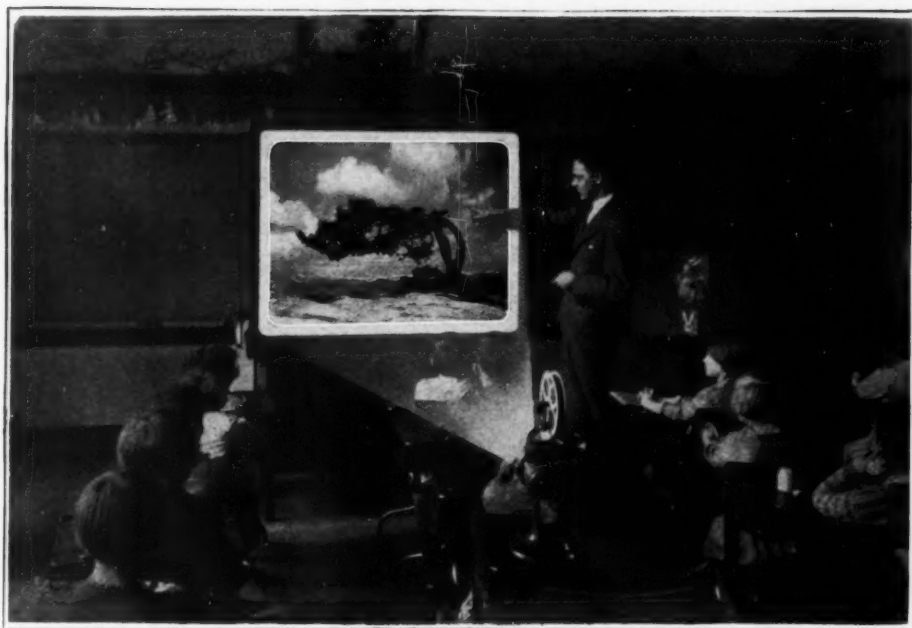


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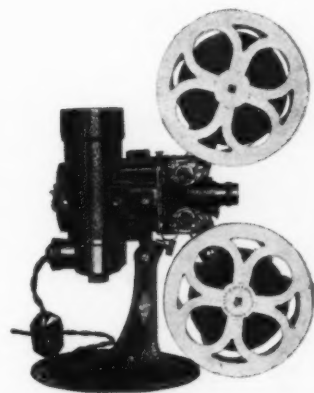
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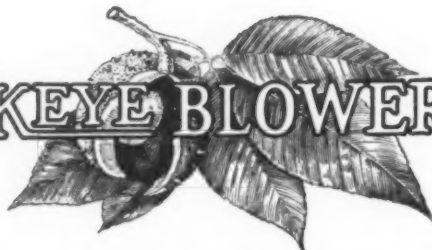
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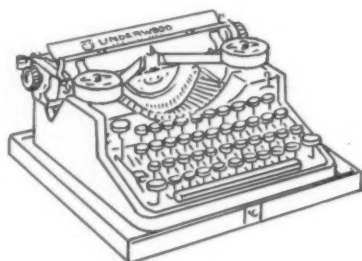
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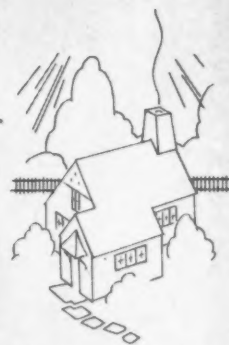
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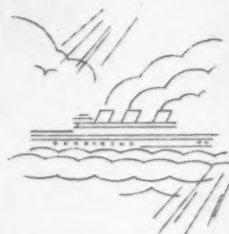
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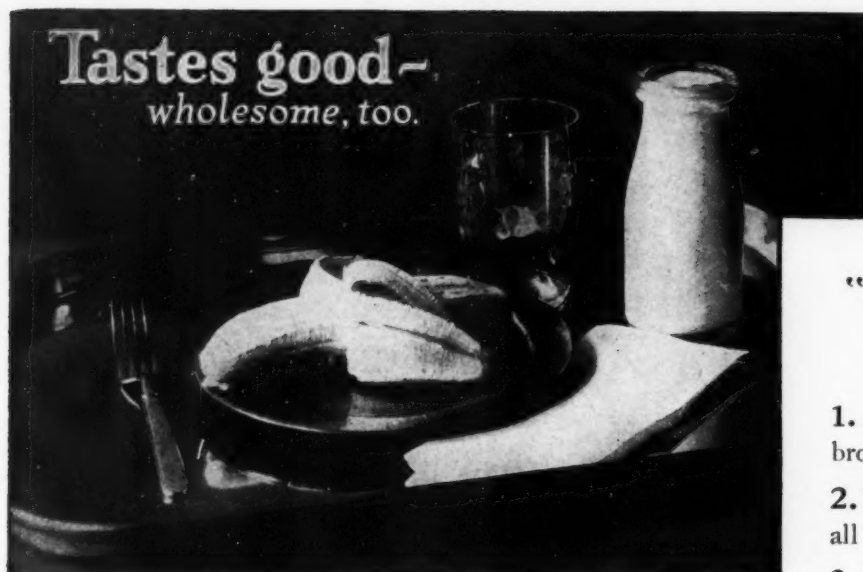
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VOLUME V

JANUARY, 1930

NUMBER 1

Interesting the Public in the School Survey

Survey publicity practices in twenty-one states and forty-eight cities are made the basis of a study on the best ways of acquainting the citizens with their schools

BY R. E. GARLIN, PH.D., PROFESSOR OF EDUCATION, TEXAS TECHNOLOGICAL COLLEGE, LUBBOCK, TEXAS

THE purpose of this article is to offer suggestions for making the findings of school surveys known to the public. These suggestions are based upon a study of the survey publicity practices in twenty-one states and forty-eight cities.¹ In one sense, these recommendations may be regarded as a summary of the best methods used at present in giving publicity to school surveys; in another sense, they may be regarded as a criticism of present day survey publicity practices.

While the recommendations made here concern themselves chiefly with statewide school surveys, they also suggest ways of giving publicity to local school surveys. Reference is made chiefly to state surveys because more comprehensive organization and planning are required for statewide survey publicity. However, the general procedure in local survey publicity would not vary enough from the procedure followed in state survey publicity to make necessary a separate group of recommendations. In other words, the suggestions for statewide publicity can be easily adapted to local requirements.

The suggestions may be set forth under four heads: (1) organization in survey publicity; (2) publicity before the survey; (3) publicity during

the field work of the survey; (4) publicity after the survey.

In the matter of organization, it is necessary first to have a state publicity committee. This committee should be appointed by the survey commission. To ensure the support of all groups, this central committee should be composed of representatives of the most important groups into which the population naturally divides itself. Since expert advice and service are needed, the central committee should employ a publicity expert who becomes a member of the committee.

The County Publicity Committee

To make effective contacts with all parts of the state, a publicity committee is then appointed for each county. The appointment of this committee is under the general direction of the central committee. The local committee, like the state committee, will consist of a chairman and several other members, one of whom is a newspaper editor. The personnel of the county committee, too, will be selected from the several population groups. Because a lack of local leadership has often been a hindrance to success in survey publicity, it is recommended that the county committee appoint at least one local leader for each community. A teacher may be chosen although it would probably be better if a prominent layman could assume the leadership of the community.

In case of a city survey, only one central com-

¹ Educational Administration and Supervision, February, 1927, pp. 109-116; School and Society, August 27, 1927, pp. 277-286; School and Society, September 15, 1928, pp. 337-340.

mittee appears to be necessary. Probably this committee should be composed of the school board and the superintendent of schools. In addition to this committee, however, it will be necessary to appoint many active leaders from the various population groups. Several of these leaders should be women.

All publicity material is prepared by the publicity expert of the central committee. It is distributed by him through the county committees, and by them through the community leaders. Likewise, all other publicity plans are directed by the central committee and executed by the subordinate committees. Each local leader is responsible for enlisting the active support of influential persons in his district and for planning the details of the publicity program in his community.

Making the Preliminary Contacts

The publicity expert of the central committee is a full-time employee. The central committee meets from time to time to approve the work that has already been done and to make further plans. Likewise, the county committees meet from time to time to direct the local publicity efforts. A clerk of the county committee, however, gives much of his time to the work.

Presurvey publicity is needed. Most of the preliminary publicity efforts will probably devolve upon the teachers, since the survey has not yet been ordered, and since there is as yet no survey commission to direct the work. This direction of publicity can come through the state teachers' organization. However, while most of this preliminary work will be in the hands of the teachers, it would probably be best to make the actual contacts with the public through the leadership of prominent laymen. No definite suggestions can be offered as to the duration of the period of presurvey publicity. The period should, however, be long enough to cause the citizens to feel that there is a real need for the survey and that the survey actually grew out of their thinking about the matter.

There are many ways by which these preliminary contacts with the public can be made. Newspapers may carry articles on the nature and meaning of school surveys and on the reasons for making the proposed survey. There will be discussions of the proposed survey at all teachers' meetings. Personal letters may be written to influential leaders and personal interviews may be had with them. To make further contacts with the leaders, it seems important to discuss the proposed survey at the meetings of all civic, social, commercial and fraternal organizations. A mass

meeting at each community schoolhouse would be an excellent way of inspiring the citizens to think about their schools. Such meetings would also be a good means for emphasizing the idea of the schoolhouse as a community center. Because much depends upon the attitude of legislators, it will be necessary to write personal letters to every member of the legislature, telling why the survey should be made and urging his support. Personal interviews should be held with all members of the legislature for the same purpose. Finally, a petition may be prepared for the legislature, signed by as many leading citizens as possible, urging that legislation be enacted to make the survey possible.

It is necessary for the leaders to see that a bill providing for a survey is introduced and that it has the active support of as large a number of legislators as possible. This bill should make definite provision for the publicity of survey findings, by arranging for a publicity organization similar to the one that has been outlined and by appropriating funds for carrying forward the publicity work. In a city survey, the school board needs only to order the survey at the proper time.

Should the legislature fail to provide the necessary funds for publicity purposes, the money must be obtained in some other way. Four sources suggest themselves: (1) large contributions from wealthy laymen; (2) smaller contributions from teachers; (3) money set aside by the school board, if the survey is local; (4) funds raised by means of tag days and other similar methods. Any one of these should be successful. In most cases, however, it is perhaps best to use a combination of these methods. Whatever money raising method is used, experience has shown it inadvisable to collect these funds chiefly from teachers. Financing the publicity program should be in the hands of the survey commission.

Continuous Publicity Is Needed

When the survey has been ordered, this information is given to the public through the press and through other mediums. The public will be told what the act of the legislature calls for and how it may assist in carrying it out. As soon as the survey commission has been appointed and the survey staff selected, the public should be informed concerning their personnel. Publicity, however, must not cease at this point. Pending the arrival of the surveyors, it is necessary to publish articles in the newspapers on the aims and accomplishments of the schools and on other matters of school interest.

Confidence in the survey staff is essential to success. For this reason, when the surveyors

arrive, they will tell the public of their plans while they are preparing for the field work. This they can do through the press and through a series of meetings. Newspaper reporters should be present at all meetings.

To avoid arousing suspicion and to inform the public thoroughly, this preliminary publicity must be carried on as quietly and as uninterruptedly as possible. There must not be long intervals during which the public is uninformed about the proposed survey.

The Mechanics of Informing the Public

The period during which the field work of the survey is being done is a time when the importance of publicity might easily be overlooked. To guard against this, it is necessary to stress publicity continually throughout this period of field work.

The organization of the machinery of publicity will have been completed by the time the survey staff arrives. As soon as any findings have been made and finally corrected, they are given to the public. This can be done in a number of ways. The surveyors and other leaders may appear before the various clubs. The findings will be given wide publicity through the newspapers. Community meetings addressed by the surveyors and others may be held. Slides may be prepared for the moving picture houses. Meetings of teachers will be held to consider the survey findings. Posters bearing important news may be placed in conspicuous places. A part of the program of all school entertainments may well consist of a consideration of survey findings.

Since it is important to reach all groups, it is necessary to enlist the active support of the leaders in each group. The following groups need to be considered: teachers and other professional men and women, farmers, business men, laborers, taxpayers, women, retired citizens, illiterates, foreigners, pupils and other young persons and the various civic clubs. Group meetings may be held at which the leaders present the findings of the survey and give the members the opportunity for open discussion.

Because of the availability of facts after the survey, considerable emphasis should be placed on publicity at this time. A number of things can be done to give the facts publicity.

In the case of a city survey, it is important that the surveyors meet with the school board, the administrative officers of the school system, the teachers, the commercial organizations, the newspaper editors, the women's clubs and other organizations for conference on and discussion of the survey findings and recommendations. Public dis-

cussions may also be given by members of the survey staff and by other leaders. If the survey is statewide, the surveyors should address as many clubs, meetings of teachers and public gatherings as possible. The type of public gathering best suited for this purpose is probably the community meeting at the schoolhouse. At such meetings, the local leaders appointed by the county publicity committee, or other leading citizens, may explain the survey findings and the recommendations for improvement. It is suggested that a series of such meetings be held at each place and a different topic discussed at each meeting. There should always be opportunity for open discussion. The special group meetings may be continued if there is a need for them.

Newspapers Should Be Used

It is important that the findings of the survey and its proposals for improving existing school conditions find their way into all the newspapers.

Experience has shown that a delay in publishing the survey report may cause a decline in the amount of school publicity. It is necessary, therefore, to guard against such a delay. It is best to publish the report in several volumes. The group leaders should receive copies of the report. A summary volume may be prepared for more general distribution within each group.

Letters and personal interviews may be used to reach the influential leaders, the taxpayers, the retired citizens and the legislators. Circular letters may be used more generally.

The use of motion picture slides and reels may be continued. Posters bearing startling findings may be used, and school entertainments may be capitalized by having a part of the programs consist of discussions of the survey.

Mediums of Selective Information

The pupils should hear the news of the survey through assembly talks. The pupils may also be used to carry publicity material into the homes.

If the recommendations call for legislation, the community meetings may appoint delegates to a state meeting, provided the people are ready for any of the legislative changes called for, to consider further the findings and recommendations and to prepare memorials to the legislature.

After this somewhat general presentation of survey facts, it is probably best for the publicity efforts to settle down to a more limited sphere. It will doubtless be a matter of several years or longer before the people will be ready to accept all of the recommendations of the survey. Some proposals they will be ready to accept immediately; others they will not accept until sometime

later. The recommendations may now be classified on the basis of the public's readiness to accept them. Beginning with those readily acceptable, the proposals are presented to the public, a few at a time, and with the proper facts and arguments to support them.

For giving this selective information of survey proposals, the newspapers will be largely used. Meetings may also be continued, especially among the illiterate element of the population. A series of short bulletins and pamphlets on special topics may be prepared for distribution in the homes. Especial care should be taken to get these bulletins into the homes of taxpayers, retired citizens and legislators.

Although a survey, because it places a school system on trial so to speak, arouses considerable excitement, all publicity efforts should be as quiet and continuous as possible and should not be of the "drive" sort. The fundamental aim must be to inform the citizens about their schools. Immediate results, no matter how urgent they may be, should always be considered a by-product of this larger aim.

On Establishing State Supported Junior Colleges in Wyoming

During the past few years there has been agitation here and there throughout Wyoming for legislation that would either make possible the establishment of junior colleges by local districts or that would establish outright state supported junior colleges. The intimation was, of course, that if the state should establish junior colleges they would be located in certain sections of the state supposed to be so isolated from the University of Wyoming that the boys and girls living in those sections were handicapped in the continuation of their educational careers. A committee was appointed by the state board of education to work jointly with the board and with the state teachers' association on this problem.

There are presented here excerpts from the report recently presented to the Wyoming State Teachers' Association.

The committee feels that districts should be forced to comply with certain academic and financial standards and regulations before they are permitted to establish junior colleges. It further feels that any legislation looking toward the establishment of junior colleges should include these standards and regulations as minimum only. If a district can meet these requirements, then it should be permitted to decide for

itself whether or not it has need of a junior college.

The committee opposes the establishment of junior colleges in various parts of Wyoming, entirely state supported. Members of the committee agree that the University of Wyoming has not yet been given adequate funds to support an adequate university educational program and that additional units of higher education will not be necessary until the state university is more crowded than it is at present. The committee recommends that the amount of state aid granted to districts establishing junior colleges shall not exceed \$1,000 per teacher. The recommendation is made on the grounds that the biggest support for a junior college should come from the communities that establish it. Excessive state aid might tend to cause some districts to establish junior colleges, whether they have any need for a junior college or not.

Following are the standards that the committee expresses itself as favoring:

1. No district shall be permitted to establish a junior college that does not have at least an assessed valuation of \$10,000,000. Successful junior colleges cannot be operated unless adequately financed. If the recommendation of the committee on limited state support is carried out, a junior college could not be operated successfully in Wyoming unless the school has at least \$10,000,000 of assessed wealth from which it can draw support.

2. No district shall be permitted to establish a junior college unless it can reasonably expect an enrollment of at least 100 students by the end of its second year of existence.

3. The number of teachers shall not be less than seven.

4. The minimum scholastic requirement of all teachers shall be not less than that set by the North Central Association, namely, "graduation from a college belonging to this association or an equivalent and, in addition, graduate work in a university of recognized standing amounting to one year."

5. The state board of education shall be the accrediting body, and the present districts shall be the administering units for junior colleges that may be established.

R. S. Hicks, superintendent, School District No. 2, Casper, Wyo., is chairman of the committee. Other members include: W. A. Chittick, principal, County High School, Buffalo; Raymond White, superintendent of schools, Douglas; S. N. Erwin, superintendent of schools, Glenrock and L. C. Tidball, commissioner of education at the time the committee was appointed.

How Philadelphia Is Solving Its Educational Problems

The various difficulties that confront many school superintendents in large cities are here outlined and suggestions made for successfully meeting them

BY EDWIN C. BROOME, SUPERINTENDENT OF SCHOOLS, PHILADELPHIA

IN THE Spring of 1921 I became superintendent of schools of Philadelphia, a difficult time for any superintendent to tackle a new job, especially in a large city system. Business was bad. There was general financial depression, and the country had not recovered from the effect of the World War.

The Board of Education of Philadelphia at that time was composed largely of men of advanced years from among Philadelphia's best citizens. Men of that kind are ordinarily conservative in their ideas and my first great problem was to ac-

quaint the board with the needs of the schools and to persuade its members to support a progressive policy. This did not take nearly as long as I had anticipated. First, the board was disposed to be friendly to the new superintendent and to give him his chance. The members also wanted good schools but they hesitated to plunge ahead. Under these circumstances, the best way to solve the problem was to work out a comprehensive plan for the advancement of the schools, and to present it by steps or stages in such a way that whatever step was undertaken at one



Classes in speech correction are one of the many innovations in Philadelphia's educational program.

time would be a logical step toward the next one.

The first specific problem was that of improving the school plant and increasing the accommodations. At that time, we had over 40,000 part-time pupils. Many of the buildings were antiquated and unsuitable for modern school uses and many of them were relatively unsafe. Practically all were overcrowded. We first made a careful survey of the building situation, district by district. In this we had the aid of the secretary of the board and the superintendent of buildings, both of whom had been in office for many years and were thoroughly familiar with the situation. We frankly called the final report "A Survey" and presented it with the idea that we should undertake only as many of the projects outlined as we could safely finance each year. The order of the projects was not made definite so that we might be free to change our plans from time to time as we became better acquainted with changing conditions.

This report was unanimously approved by the board, and we began to carry out what virtually was a building program. Since that time over fifty million dollars have been spent in renovating old buildings and in constructing new ones. Part-time attendance has been reduced to a negligible quantity. Twenty junior high schools and two senior high schools, with about forty elementary schools, have been constructed, as well as several schools of special type. Building sites for new schools have been purchased in newer sections of the city awaiting future development. All this has been done at an average expenditure of from eight to ten million dollars a year.

How Teachers' Salaries Were Raised

The next problem to be attacked was the subject of teachers' salaries. Through the energy of Dr. Thomas E. Finegan, at that time state superintendent of public instruction, the Edmunds Act was passed by the state legislature, which established a minimum salary schedule for all school districts of the state. That in itself brought about a considerable increase of salaries, especially for the elementary and junior high school teachers, supervisors and principals. Our problem since that time has been to work out salary plans which would rectify inequalities in the state salary schedule and provide for further increases to meet the advance in living costs.

We tackled this problem by steps. The first step was to raise the salary schedules for members of the administrative staff, as there was no provision for that in the state salary schedule. At that time, the salaries of the high school prin-

cipals were also increased \$500. We next increased the salaries of supervisors from a maximum of \$2,800, as provided by the state schedule, to a maximum of \$3,200. Since we believed that the difference between the maximum salary of elementary school teachers and that of senior high school teachers was too great, our next step, taken in 1926, was to extend the maximum for elementary school teachers and principals, the teachers receiving four additional increments above the provisions of the state salary schedule and the principals receiving two additional increments above the provisions of the state salary schedule. Last year we worked on a schedule to provide a general increase all along the line by the process of adding increments in the case of those who have reached the maximum. We were hoping to have this new schedule adopted for 1930, but the financial conditions of the board make that prospect discouraging.

Improving Quality of Instruction

The next problem was that of improving the quality and standards of instruction throughout the schools. The first step was to hold meetings of sections of teachers and principals when ways of improving methods of instruction and supervision might be suggested. The difficulty met with here was that plans had to be based largely upon opinion and guess work. We soon realized the need of having a division of educational research and results, and upon the recommendation of the superintendent such a division was created in 1925. The new director immediately began to study the situation, applying the usual standard tests of both the survey and diagnostic character and working out tests when no standard tests were available. After every test, conferences with assistant superintendents and principals were called. One of the results of establishing the division of research has been that teachers throughout the school system have become scientifically minded and are no longer willing to accept results on faith. We have had from the first excellent cooperation from principals and teachers throughout the city.

One of the best things we have done has been the organization of the Logan Demonstration School. We took over a newly erected elementary school which was attended by neighborhood children, so that the situation is a normal one. We assigned to the school selected teachers from the system, giving them extra compensation for the service, and we used the school for the demonstration of our course of study under normal conditions but with expert teachers. Our teachers are sent to this school to spend a day a term, or

two days a year if they wish. They spend the entire time in a classroom which represents work similar to their own. They take careful notes of what they observe and then have a conference with the demonstration teacher after school.

In this way, our teachers are constantly bringing back to their classes and to their colleagues new ideas of what it is possible to accomplish with our own course of study under normal conditions. During the last school year, 6,269 teachers and principals visited this school for the purpose described. The school is becoming attractive to teachers outside of the city, and a limited number of them are permitted to visit it. We have been considering also the establishment of an experimental school but are not sure whether that is a public school problem or a university

problem. I am inclined to believe that experimental work is the responsibility of the university.

In connection with improvements of teaching standards, it may interest the reader to know that we have a city normal school which for years has provided a two-year course of instruction for prospective teachers of elementary schools. The work of this school has been considerably extended and its usefulness increased. The course has been extended now to three years. We have obtained the authority of the Board of Public Education to offer further courses for teachers in service who by obtaining part of their work in universities may continue to take professional courses at the normal school until they have met the necessary requirements for a college degree,



The children take great delight in their health education demonstrations.

when they receive the degree of bachelor of science in education from our normal school.

This is a form of teacher training during service. The privilege is open only to teachers who have been in service a certain length of time and whose meritorious work warrants the extension of this privilege. We do not intend to offer this opportunity broadcast. The normal school will continue to give a three-year course. Last year, we established extension courses for teachers in service as a preliminary step toward this larger program. We also made the principal of the normal school director of teacher training before and during service; hence, our teacher training includes preparation in the normal school, practice teaching in four fully organized schools of practice, extension courses for specific purposes, and an extended year for those who wish to take a degree in education under our supervision.

Another project that has proved popular was the erection of an intermediate vocation school known as the Mastbaum School, opened about a year ago. This school gives courses during the day to pupils who may not be desirous of or in a position to pursue a full four-year high school course, but who wish to receive some preparation for a vocation. The courses are general, covering a number of fields, from typewriting to vocational art and music as well as all of the various mechanical courses, including textile courses. The school will not give a diploma but will give a certificate for work completed. A continuation school is housed in the same building, but this is more a matter of convenience than an expression of ultimate policy. We believe that the demand for intermediate vocational training will some day crowd the continuation school out. We also have a flourishing vocational evening school in the same building.

Increasing Health Facilities

Another problem was to improve the provisions for the health of school children. We had the usual medical inspection that is found in schools in large cities, but that did not seem adequate. We needed much more in that field. We needed clinics where the children might be treated. We needed many more nurses to visit the homes and seek the cooperation of parents in having the physical defects corrected when they were discovered by the medical inspectors. We needed to look after the health of the teachers and to improve the sanitation of the school buildings.

All these things were done step by step. First, we doubled the number of school nurses. Next, we increased the number of medical inspectors and assigned several of them to special duties,

such as looking after the eyesight or the hearing of the children. An annual rating of the sanitary condition of the school buildings was made by the medical inspectors. As a result, last year our school plant had the highest sanitary rating it has ever had, reaching about 92 per cent. We are now able to secure from 50 to 60 per cent correction of physical defects in children. We make the Schick test for diphtheria and provide toxin-antitoxin as a preventive against the disease. The additional doctors and nurses required for this procedure were supplied cheerfully by the board. From 1926 to June 30, 1929, 194,338 children have been immunized against diphtheria, and the cases of the disease among school children have been reduced 79.2 per cent.

Next, the health of the teachers was considered. Periodic health examinations were instituted for all teachers and other employees in the school system. No charge is made for the examinations which are compulsory, but the facts revealed are regarded as confidential. Teachers are permitted to have the examination made by their own physicians, but it must cover the same items as the examination given by our medical inspectors.

Organizing a Teachers' Council

Another problem was how to bring about cooperation among the teaching body, which had been broken up into factions through salary campaigns and other forms of contention. The situation did not look encouraging. There were a number of rival organizations of teachers, each one jealously contending for leadership. A certain group was meeting in the evenings in the home of a private citizen, planning a teachers' council which was to have been composed of members of the teachers' organizations without reference to the official or teaching groups. The citizen leader of this group, after meeting me and learning that I was interested in organizing a council that would be representative of all the teaching and supervisory groups rather than one that merely represented the voluntary organizations of teachers, was impressed with the idea and decided to turn the whole subject over to me. Mass meetings of teachers were called, and my plans were carefully laid before them and approved. A committee representing as nearly proportionately as possible the several teaching and supervisory groups was appointed by these groups and commenced work on drawing up a plan for the teachers' council.

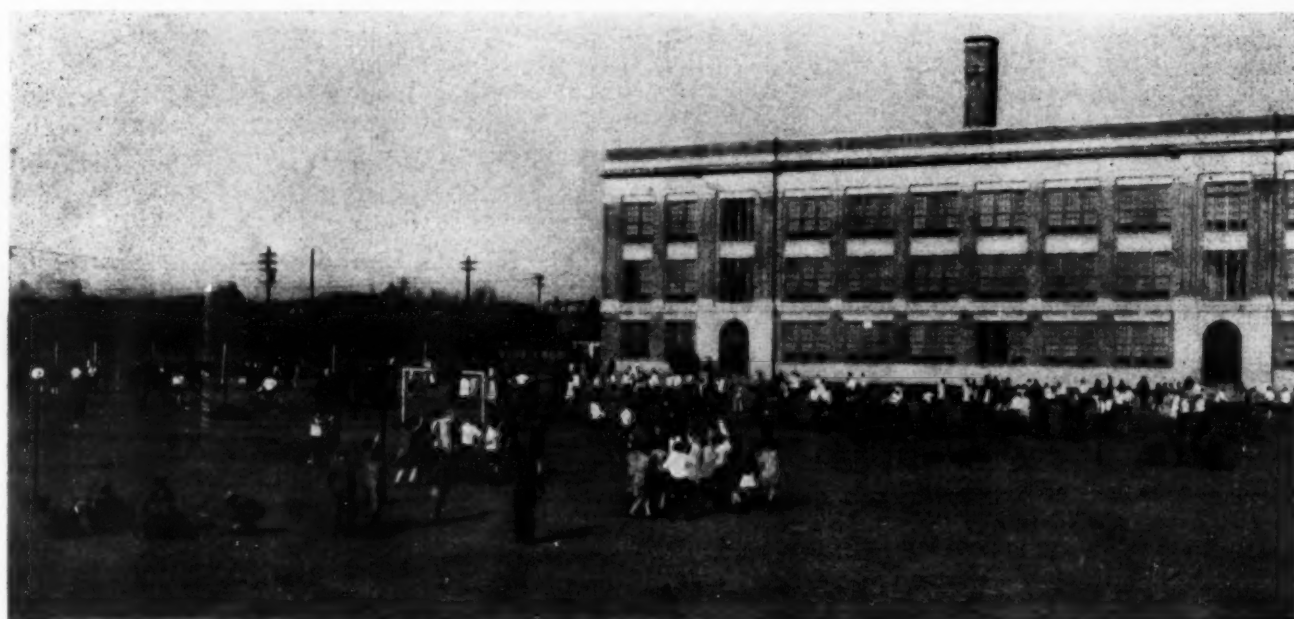
Finally, a plan was completed and was adopted practically unanimously by the teachers of the city. This plan provides that every person in a

supervisory or teaching capacity in the city, together with those representing the clerical force, the attendance division and the division of medical inspection, automatically becomes a member of the Philadelphia Public School Council. The executive committee of the council is known as the council of delegates. This consists of about thirty people representative of every group and elected by the groups. This council has been in existence since 1923 and is recognized by the board of education as the official representative of the teachers. The council has accomplished a number of good things and affords me an opportunity of knowing what the teaching body wants. I am an ex-officio member of the council, but do not vote although I attend all of the meetings.

Another problem was the standardizing of

education also purchased a large warehouse for the storage and issuance of supplies and equipment, for the repairing and refinishing of furniture, the printing of school reports and forms and other services that otherwise would be let out at contract or done in an unbusinesslike and expensive way. The warehouse is under the direct supervision of the secretary and business manager, but all requisitions on the warehouse for supplies and equipment must come from the principals and be approved by the superintendent.

Another problem that confronted us was the care of habitual truants, a problem that confronts all large school systems. We have attempted to solve it by the establishment of a residential school known as the Shallcross Residential School. The board of education secured a large



In the "Athletics for Everybody" program, junior and senior high school pupils are assigned on afternoons after school to games and activities in which they are particularly interested.

supplies and equipment. We found that principals were in the habit of sending in requisitions for all kinds of material and equipment regardless of any standardized list, and the result was that some schools were overequipped and oversupplied while others were underequipped and undersupplied. In conjunction with the business office, the superintendent, through an associate, worked out a plan of a quantity and money allotment of supplies on a pupil basis for all types of schools, so that requisitions must be based on such an allotment. Then, school equipment was standardized so that when a new school is built it is equipped with the necessary standardized equipment needed for the number of pupils to be accommodated. These two provisions have saved the board thousands of dollars in the matter of equipment and supplies. The board of public

farm site of over eighty acres, within the city limits but ten miles from the center of the city. The purpose was to establish a school where boys who have become habitual truants and are beyond the control of their parents or whose homes are of such a nature that they have ceased to become an influence for good, may be sent.

The school is built on the cottage plan with general central facilities, such as an assembly room, a gymnasium, an office, a heating plant, a dining room and a laundry. Each cottage is double and provides for a family of thirty boys in each half. Over each family there is an experienced house mother and house father. In addition to receiving regular instruction by carefully selected teachers, these boys gain experience in farming, in handling animals, in cutting wood, in taking care of the grounds and in various forms

of handwork. They are fed, clothed and housed by the board of education. They are sent there by the superintendent of schools, or his deputy, upon the written consent of the parents or, if this is not obtainable, they may be committed by the juvenile court. They remain until, in the opinion of the principal and the superintendent, they are sufficiently reformed to be sent back to their own homes and former schools. One of the unexpected results is that the boys who go there like the school so well that they are reluctant to return home and we have seldom had the experience of boys running away. When this school is completed, it will accommodate between 350 and 400 boys. At present only three of the cottage units are completed and occupied.

Committees Work on Curriculum Revision

A problem that has confronted most superintendents during the last five or six years is the revision of the curriculum. We have had that problem also, but we have not solved it in the way many others have done, namely, by a sweeping revision. Several years ago we appointed standing committees on the curriculum, each committee from the elementary schools headed by an assistant district superintendent and each committee from the senior high schools led by a department head in senior high schools. These committees are held responsible year after year for knowing what changes in their respective branches of study are desirable and what is being done in other parts of the country, as well as for having an acquaintance with the best textbooks on their respective subjects. As these are standing committees and meet throughout the school year, they are in a position to keep their respective parts of the curriculum up to date without the general upheaval that comes from a revision of the entire course of study for all departments at one time. We consider all of our curriculums as tentative and subject to change as new ideas appear. The same committees are also held responsible for an acquaintance with all textbooks as they are produced and have the further responsibility of recommending to the superintendent those that are suitable.

There are other problems that we have had to face in the same way as those described and we have solved them with more or less success. One more will be mentioned—the problem of providing supervised games for all pupils in the higher schools as a part of their regular daily program. The plan adopted last year, for which an appropriation of \$40,000 was made, is called our "Athletics for Everybody" program. In common with other superintendents, I have long appreciated

the fact that most of the money and most of the energy devoted to athletics have been expended on developing a few teams in which only a small number might participate and that we have correspondingly ignored the needs of the majority.

It is about time that the grand stand should take the field and have some of the opportunities for athletic competition that are reserved for the teams. We therefore organized a plan whereby the pupils of both sexes in senior and junior high schools on certain afternoons after school hours may be assigned to games and activities in which they are particularly interested. These games and activities are supervised by our own teachers who know the pupils and are competent in managing them. All available play space, including grounds around the school and in the neighborhood, has been pressed into service. This plan is now in full operation. Those who supervise the work are given compensation for the extra time that they devote to it.

The work of educational engineering such as the superintendent of schools of a large city has to perform is one of the most fascinating games in the world. It requires constant vigilance, continuous application, willingness to accept defeat cheerfully, readiness to concede that others, including board members, may have ideas that are better than those of the superintendent, willingness and ability to mingle with the people and to join their organizations and, above all, modesty combined with courage.

A Course in Visual Education for Pennsylvania Teachers

Five state teachers' colleges and three other schools of higher education in Pennsylvania offered a definite course in visual education and other sensory techniques during the last summer. This is the first time in the history of the state that such courses have been offered, the *Pennsylvania School Journal* says.

The success of this course and the increased demand for visual techniques have led the board of college presidents to offer during the college term of 1929-30 a course that will include the summary of visual and other techniques used at the summer schools. This means that all graduates from state teachers' colleges will bring to their positions a thorough preparation in how and when to use visual materials.

The rapid development of the school journey, objects, specimens, models, maps, charts, projectors and pictorial materials has made it necessary for teachers to know the values of these visual aids and their place in instruction.

Combating the Problem of Too Many Teachers

This study, concerned primarily with the problem of balancing the supply and demand of teachers in Texas, also shows that other states are facing a similar situation

BY FELIX HELMUTH ULLRICH, M.A., BRACKENRIDGE SENIOR HIGH SCHOOL, SAN ANTONIO, TEXAS

IT WILL be remembered that during the World War many men left the teaching profession to enter the service. In addition, many who would ordinarily have entered the teaching profession enlisted. The situation became almost acute. Inferior teachers took the place of well qualified teachers and standards were lowered in most places. Educators have repeatedly referred to that condition as deplorable.

After several years, the supply was again increased until the supply and demand were about equal. The pendulum, however, continued to swing until to-day many school men are of the opinion that there is a large surplus of teachers in the United States and that conditions are again deplorable.

That unappointed applicants have taken the present situation seriously is evidenced by the following extract from an editorial appearing in the *Elementary School Journal*: "In New York City an association has been formed by 500 unemployed holders of License No. 1, known as the Association of Unappointed and Unemployed Teachers."

The prevalent voicing of mere opinions and the scarcity of factual information point to the complexity of this problem. It must also be remembered that the law of supply and demand as applied to teachers does not hold as it does for commodities that are placed on the market. For example, it takes time to train a teacher, often two, four or five years beyond a high school education. Therefore any existing oversupply requires several years for readjustment.

Comments by School Men

Some comments by school men will be given before the sources of data and the method employed in making this investigation are discussed. In the main, these statements are based on such criteria as the number of applications received for positions in the common branches of study, the great influx of students into the colleges and universities, the number of unplaced applicants who

registered for teaching positions and the certification of new teachers.

In the May, 1928, issue of the *School Board Journal*, Superintendent Albert V. Lockhart, Calumet, Ill., calls attention to the surplus of teachers when he says: "New York and Chicago are turning out more teachers from their teacher training institutions than there are vacancies. In other cities similar conditions exist. State and county superintendents likewise report large surpluses of unemployed teachers. County Superintendent Edward J. Tobin of Cook County, Illinois, frankly advises girls to consider other lines of work because there are not enough classroom positions to go around."

Situation in Texas Outlined

Superintendent Seeder discusses the situation in Minnesota when he says: "In 1927-28 the situation is much more serious, and there is a question as to whether the training schools are not turning out too many teachers."

An interesting situation is revealed at the North Texas State Teachers College, Denton, Texas. The following paragraphs are taken from an article by E. H. Farrington which appeared in the *Campus Chat*:

"Out of a total campus enrollment of 4,289 college students for the entire session of 1927-28, the placement office announces that a poll of the student body shows that approximately 3,000 will be actively engaged in teaching during the next school year.

"In addition to academic and personal qualifications, school officials demand that teachers be qualified for extra-curricular activities such as coaching, debating, declamations, directing high school bands and other school and community activities. 'Inside' or classroom teachers only, have little chance of securing a desirable teaching position."

Some of the questionnaires that were sent to county superintendents in Texas brought volun-

tary comments on the supply and demand for teachers in the rural schools. Some of their exact statements follow:

"There is no question that there is an oversupply of teachers. I am swamped with applications. Colleges have mass production."

"I almost 'rave in my despair' when I attempt to raise the professional standard here. I imagine that the work is just as difficult in all other counties. We have too many teachers, too many kinds of certificates, too many school boards in the rural districts and too many home teachers. In one of my districts the local board employed a teacher with a second-class certificate because he lived in the community. They had sufficient funds to employ a degree teacher. The majority of the rural trustees believe that any home girl or boy who has had one year in college or university is a graduate of that institution."

"We have many inquiries for vacancies. There seems to be a large surplus of teachers."

"If this section of the state is a fair sample, we could dispense with certificates. However, such a suggestion would probably raise a young war in the legislature, since we have established the unfortunate tradition that teaching in the rural schools is a legitimate place for the ambitious young to make money to educate themselves."

"We have at least ten applications for every vacancy in every school in the county. The applicants do not even wait to find out whether or not there is a vacancy."

How Colleges Regard the Situation

A questionnaire was sent to the chairmen of the teachers' appointment committee in fourteen state institutions of higher learning. Replies were received from the following institutions: the University of California, the University of Illinois, the University of Minnesota, the University of Michigan, Stanford University, the University of Florida, the University of North Carolina, the University of Ohio, Colorado State Teachers' College and the University of Kansas. Several of the questions and answers are presented here.

Was there an oversupply of high school teachers and elementary school teachers in your state who were actively seeking teaching positions last year? All institutions answered in the affirmative.

In what branches of study was the oversupply the greatest? All institutions mentioned English and history. One institution included mathematics.

What was the situation with respect to superintendents? "There was an oversupply." "Those trained professionally have to wait too long for old untrained men to leave." "Too many people

are trained for 'administration.'" "There is an oversupply of administrators, and always will be because it is higher paid and everyone makes an attempt to get in. Moreover, all administrators who are working are trying to get other positions which are better. The situation was never more deplorable than at present." "Many superintendents accepted inferior positions." "Many more trained than there are positions." "Not an oversupply of well trained superintendents." The other institutions failed to indicate the situation in the superintendencies.

How Information Was Secured

Is the situation more acute than it was five years ago? All replied in the affirmative. Two said, "Yes, much more so and growing worse."

Please estimate the number of teachers who were actively registered with your teacher placing bureau last year and the number who failed to get positions. The number of teachers who were actively registered for teaching positions ranged from 581 in one institution to 3,409 in another institution. The percentage of unplaced applicants ranged from 10 per cent in one institution to 30 per cent in another institution.

What was the situation with respect to those who were seeking positions of collegiate or university rank? "Not so extreme; bad for those of limited training." "Not much of an oversupply except for those who have only a master's degree." "Oversupply of M.A.'s. Brisk demand for Ph.D.'s." "Not many vacancies but a reasonable number of candidates." "No oversupply." "Not enough with Ph.D. degrees." "Too many inexperienced M.A. degree people are trying to get into college work. We feel that too many colleges demand Ph.D. people and offer shockingly low salaries. We feel that many colleges make a mistake in not filling their positions with good M.A. persons instead of inferior Ph.D.'s."

What remedy would you suggest for solving this problem? "Teacher training institutions should seek to select more carefully and to recommend, as far as the supply will warrant, only those best qualified. School authorities are justified in exercising greater discrimination in the selection of teachers." "Raising standards." "Higher certification laws." "Restriction of enrollment; better selection of candidates, with at least as high standards as superintendents use in selecting teachers. Graduating only those the department concerned can and will recommend." The other institutions failed to suggest a remedy.

Because of the almost impossible task of arriving at the actual number of persons who actively sought positions for the 1928-29 school ses-

sion, this investigation, which concerns itself with the supply and demand of teachers in Texas, was limited to those who sought positions through the higher institutions of learning. Questionnaires, accompanied by a personal letter, were sent to the senior colleges, state teachers' colleges and junior colleges in Texas. The questionnaires relative to those seeking college positions and those filling college vacancies were arranged in such a manner that all persons would be classified in each of the branches of study according to sex, professional training and experience. The questionnaires relative to the situation in the high schools were similar.

The number of applicants seeking positions in colleges or universities through the University of Texas was obtained from the records of the teachers' appointment committee. In addition, a questionnaire was sent to the chairman of each of the various departments of instruction of that institution. Each chairman was asked to submit the names of persons in his department who were actively seeking college or university positions for the 1928-29 school session and to indicate the sex of each applicant, the kind of degree he held and whether or not he was an experienced teacher. The names which appeared on the returned questionnaires but which did not appear on the records of the teachers' appointment committee, were added to the total number of applicants who sought college or university positions through the University of Texas. The vacancies that were filled in the University of Texas were secured by obtaining the names of the people who were added to the faculty for the 1928-29 session. Those whose appointments became effective in February, 1929, were not included. In totaling the number of persons who sought or filled college positions, only those persons were included who ranked as instructors or above.

Presidents and Deans Are Questioned

To secure the number of applicants for college positions and the number of college vacancies, a questionnaire was sent to the presidents of each of the senior colleges, the state teachers' colleges and to the deans of the junior colleges. Seventy-three per cent of the colleges returned the questionnaires.

The vacancies in the superintendencies and in the high schools were obtained from the "1928 Directory of High School Teachers" published by the Texas State Department of Education. As no directory of the elementary teachers has been published, the vacancies occurring in this group were obtained from the registration cards in the files of the state department of education. Elementary principals were included among the ele-

mentary teachers, as the majority were teaching one or more classes.

The number of people actively registered at the University of Texas for positions in high schools, elementary schools or for superintendencies was obtained from the records of the teachers' appointment committee. The same information was obtained from the Texas colleges by means of a questionnaire which was sent to the chairmen of the teacher placing bureaus. There are no teachers' agencies in Texas.

Difficulties in Solving the Problem

The investigation into the supply and demand of teachers in Texas was fraught with numerous complications and complexities which increased as the study progressed. The greatest difficulty of the entire problem had to do with the supply, for it was difficult to arrive at some definite conclusion as to just who constitutes the supply. For example, should all superintendents who are earning less than \$2,500 and who are well qualified to hold a position paying \$3,000 be considered among the supply for such a position? In the foregoing instance, those who were actively seeking such a position certainly would be considered as applicants, but many of them might not have applied for the position because they did not know the vacancy existed. Just where to draw the line is debatable. The number of applications made for each vacancy cannot be taken as a criterion of the supply, since many applicants apply for more than one position. If the names and information of every person who made a personal or a written application for a school position in Texas could be obtained, then duplicate names of applicants could be eliminated and the final result would show the actual supply. Such a task is so enormous as to be beyond the scope of this investigation.

A limited number of studies in the same general field have been made in other states. The scope of these studies and the techniques used were adapted only to the state in which the investigation was made, since the sources of data were different in each case. In fact, the sources of data varied according to the nature of the reports kept at the state departments of education and at the teacher training institutions. This investigation was conducted in such a manner as to provide for the utilization of the available sources of data in Texas.

This study is limited to the supply and demand of white teachers and does not include teachers employed in the night schools except as they may also have been employed in the day schools. Substitute teachers and kindergarten teachers are not included, nor does this study include an inquiry

into the teacher turnover or the teacher migration within the state.

With reference to the supply, only those persons were considered who were actively seeking positions through the University of Texas and Texas colleges. Duplication of applicants was eliminated or reduced to a minimum by having each institution include only its students and former students. It seems reasonable to assume that the oversupply as revealed by this study, would be materially increased if those applicants were added who were actively seeking positions but were not registered at a teachers' placing bureau. The number of vacancies was determined according to the number of persons who taught in a particular school for the first time. This eliminated duplication of vacancies resulting from promotions within the school. On the other hand, this method of arriving at the number of vacancies did not eliminate duplication of vacancies resulting from promotions from one school to another. All applicants who were registered to teach several subjects were classified according to their first choice while those who filled vacancies and taught more than one subject were classified according to their major field. Only the major findings of this investigation will be given here.

Supply and demand of college instructors: A total of 283 persons was actively seeking positions of instructional rank or above in universities or colleges. Of this number, 152 were men and 131 were women. In comparison, 117 vacancies were filled with men and 60 vacancies were filled with women. In the branches of study in which there was an oversupply, there was a total surplus of 156 applicants. The greatest oversupply occurred in history with 41, English with 20 and education with 18. The surplus of 156 applicants does not mean, however, that all of these were unplaced, for undoubtedly some of these accepted positions in other states, retained their present position or filled vacancies which they failed to report to the agencies through which they were seeking appointments. In the branches of study in which there was an undersupply, there was a total shortage of 50. The greatest shortage occurred in engineering, home economics, public speaking and music.

Men Are Preferred for College Positions

There were no vacancies in Texas for 23 per cent of the male applicants; for the female applicants the percentage was more than twice as great, namely, 55 per cent. This seems to indicate that men, perhaps, are preferred for college positions, or that men can fill the positions in which the shortage appeared, better than women. This,

of course, would not be true in the case of home economics.

Of the 283 applicants seeking college or university positions, 11 applicants, or 4 per cent, held doctors' degrees; 230 applicants, or 81 per cent, held masters' degrees and 42 applicants, or 15 per cent, held bachelors' degrees.

Oversupply of Masters' Degrees

The study further reveals that there is a material shortage of those having doctors' degrees and an oversupply of those having masters' degrees. This study also shows that an opportunity for college teaching came to those having only bachelors' degrees while an oversupply of those having masters' degrees existed. The number of male applicants exceeded the number of female applicants in agriculture, business administration, chemistry, economics, education, engineering, government, history, journalism, mathematics, philosophy and physics. The number of female applicants exceeded the number of male applicants in botany, English, French, Latin, psychology, physical education, sociology and Spanish.

Supply and demand of superintendents: Of the 175 persons who sought superintendencies, 160 were men and 15 were women. There were 105 vacancies in the superintendencies, all of which were filled by men, although 15 women were actively registered. Of the 175 applicants, 24, or 13 per cent held masters' degrees; 107, or 61 per cent, held bachelors' degrees and 44, or 26 per cent, were undergraduates. Ninety per cent of the applicants were experienced teachers and administrators. There was a total oversupply of 70, the greatest oversupply occurring among those having bachelors' degrees and among those who were undergraduates.

Supply and demand of high school teachers: A total of 2,340 actively registered applicants sought positions as high school teachers. Of this number 620 were men and 1,720 were women. One per cent of the applicants held masters' degrees, 62 per cent of the applicants held bachelors' degrees and 37 per cent of the applicants were undergraduates. Forty-five per cent of the applicants were experienced.

A total of 1,684 high school vacancies were filled. There seemed to be a large demand for high school teachers who held masters' degrees, since only 26 of the applicants held masters' degrees while 120 of the teachers who filled high school vacancies held masters' degrees. Approximately 100 of these vacancies must have been filled by persons not registered at the higher institutions of learning. The percentage holding bachelors' degrees among those who filled the vacancies was

also greater than the percentage of applicants who held bachelors' degrees. As far as the registered applicants were concerned, there was an oversupply of 537 undergraduates, 213 with bachelors' degrees, and a shortage of 94 with masters' degrees. There was a surplus of 786 inexperienced applicants and a shortage of 130 experienced applicants. This shortage would be materially increased if the colleges which are not represented in this study had supplied the data, and still further increased if those who sought positions on their own initiative were added to this number.

There was a total oversupply of 91 male applicants and 565 female applicants. The branches of study in which the oversupply was the greatest are in the descending order: English, home economics, Spanish and social science.

Three state teachers' colleges and one senior college supplied information relative to the number of applicants who were registered for positions in the schools, but they failed to classify the registered applicants according to sex, professional training, experience and branches of study to be taught. If these unclassified applicants were added to the number of classified applicants, the sum would represent the total number of applicants who were actively seeking superintendencies, high school positions and elementary school positions. In these four colleges 60 persons were seeking superintendencies and 565 persons were seeking high school teaching positions. This brings the total oversupply of superintendents to 130 persons and the oversupply of high school teachers to 1,221 persons.

With regard to the supply and demand of the teachers in the elementary and rural schools, it may be said that the situation in these groups is more acute than in the colleges or high schools.

Applications and Vacancies

The total number of registered applicants who sought superintendencies, high school positions and elementary school positions was 5,171. Of this number, 1,130 or 21.8 per cent, failed to get positions, according to the estimates given by the institutions through which they sought positions. In one institution which registered 531 applicants, only 10 failed to get positions. This was explained as follows: "Our high percentage in placement comes from the fact that the names of those who are considered unfit are eliminated from the files."

A questionnaire was sent to the secretaries of the school boards in a number of Texas towns and cities. The secretaries were asked to estimate the total number of applications that was received in 1928 for the position of superintendent and for teaching positions. In the larger Texas cities the

number of applications received for teaching positions ranged from 800 at Beaumont to 4,000 at San Antonio, Dallas and Houston. Dallas received 3,000 applications in 1924 and 4,000 in 1928; El Paso received 550 in 1924 and 1,000 in 1928; Houston received 1,500 in 1924 and 4,000 in 1928. The six cities, Dallas, Beaumont, El Paso, Houston, San Antonio and Waco had a total teaching personnel of 4,210 persons and these cities received a total of 15,300 applications. H. D. Fillers, in a recent investigation, found that the average rate of teacher turnover in the larger Texas cities was 10.5 per cent. If one assumes that the average rate of turnover in these cities is 10 per cent, then it appears that six Texas cities received 15,300 applications for 421 vacancies.

Situation Is Improving

A similar situation exists in the smaller school systems. Thirteen Texas towns received a total of 431 applications for the thirteen vacancies in the superintendency. These thirteen towns had a teaching personnel ranging from eight at Kirkland to 46 at Ennis, and received 1,022 applications for approximately 35 vacancies in teaching positions. Ennis, which is representative of the group, received 80 applications in 1924 for teaching positions, 200 applications in 1928 for teaching positions and 86 applications in 1928 for the superintendency.

Many schools in Texas are still employing teachers who have a limited amount of professional and academic training. According to the twenty-fifth biennial report of the state department of education, approximately 6,000, or 50 per cent, of the elementary teachers in the independent districts are graduates of high schools only. In the high schools, 1,215, or 24 per cent, of the teachers are not college graduates. The situation in the common school districts is much worse. From this it appears that if the schools would insist upon employing persons who have the proper amount of academic and professional training, there would be a brisk demand for well qualified teachers. For example, if every high school in the Texas independent districts demanded a college or university graduate, there would be vacancies for 1,215 high school teachers. However, this situation is slowly becoming better. In 1926-27, 35 per cent of all the classroom teachers in the independent districts were college or university graduates, while in 1927-28 the percentage had increased to 37 per cent.

J. W. Crabtree, secretary of the National Education Association, indicates the part the teacher training institutions will play in solving this problem. He recently said in the *Texas Outlook*:

"Teacher training institutions will select with greater care those who are candidates for the important work of teaching the nation's children. . . . More careful consideration will be given to each candidate's innate qualifications for teaching. Such matters as intelligence, cultural background, personal appearance, health and social acceptability will be considered. Progress will be made in the ability to measure the qualities which promise success in teaching.

"Teacher training institutions will give much more attention to the guidance of those admitted. Ten years from now professional schools for teachers will be in possession of the facts as to the total number of teachers required and the number needed for particular lines of work, such as elementary, secondary and collegiate and the number needed in special subject fields. . . . Students will not spend years preparing for teaching and then be forced to enter other lines of work, or be obliged to accept teaching positions for which they have not been trained and in which they will not function effectively. A reasonable balance between teacher supply and demand will be worked out. To train many more teachers than there are available positions is waste. . . . We should soon reach the time when the equivalent of four years' training above the high school will be required of all elementary teachers and five years for junior and senior high school teachers."

The solution of this problem of teacher oversupply is not easy. The state department of education and the teacher training institutions cannot solve it alone. School officials who select teachers to fill positions must do their part. However, whatever method or plan is put into operation for solving this complex problem, better teachers will be put into the classroom—"the kind of teachers American boys and girls richly deserve as their normal right."

The Importance of City Schools as Research Laboratories

City schools everywhere in the United States, in addition to purely experimental schools, should be used as laboratories for conducting investigations into educational methods in the opinion of the chief of the division of city schools, W. S. Deffenbaugh, of the Office of Education.

Mr. Deffenbaugh, in discussing significant educational movements, calls attention to the fact that much progress has been made in the past ten years in experimental research in the city schools, and that problems now are being attacked more scientifically.

"The great progress made in the city schools of the country within the past ten years has without doubt been due to the fact that educational problems have been attacked more scientifically.

"Until recently the trial-and-error method was the only means of testing a theory, and even then it was practically impossible to determine which was the better of two or more procedures. Now that it is possible to test the results of experiments, educational research should be directed more and more to experimental work.

"Material throwing light on prevailing practices is valuable, but such practices may be entirely wrong. If all the school people were to conform to prevailing practices, there would be no educational progress. Some city school systems that have well organized research bureaus are conducting investigations that are worth while, but unless a city has a well equipped research bureau, or unless some institution, such as a college of education, is using the schools of the city for the purpose of making research studies, little importance may be attached to many of the experiments now under way."

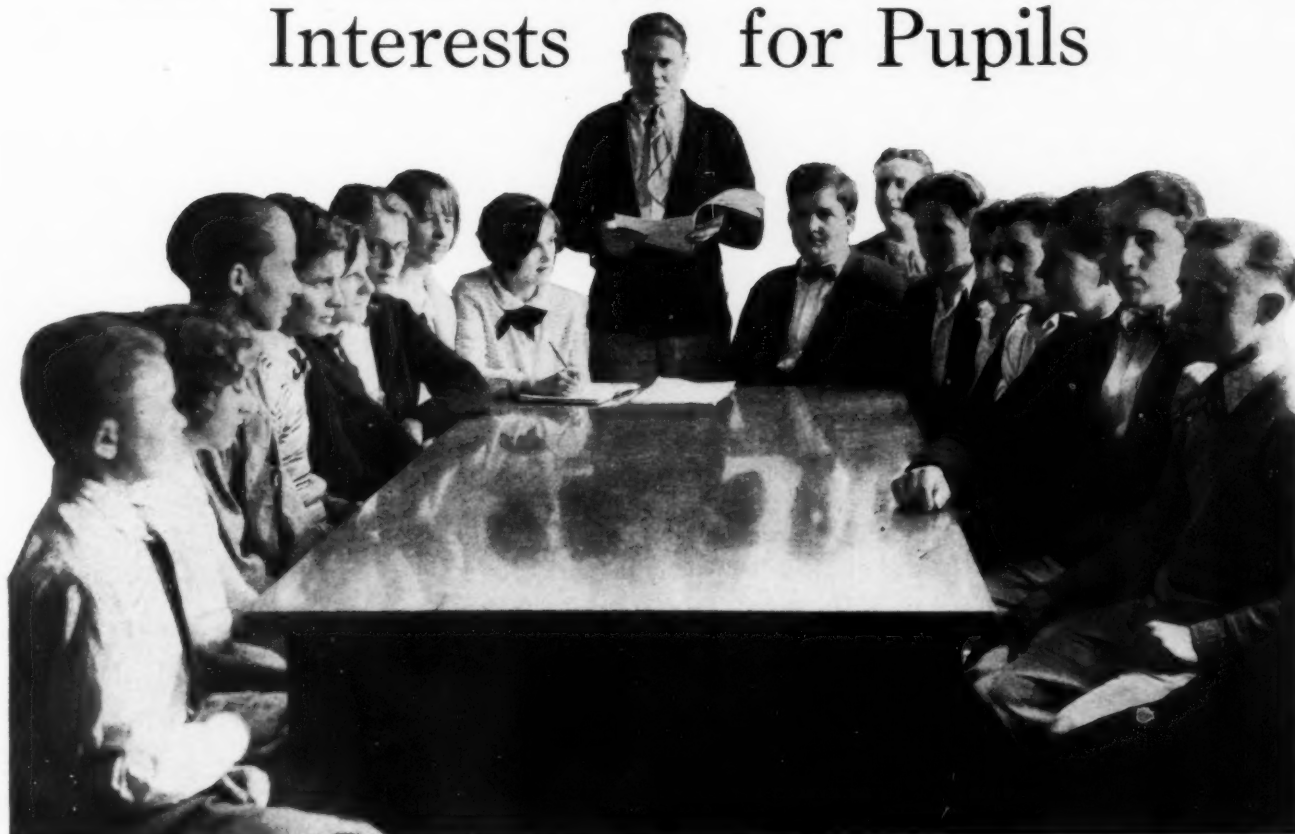
A Scientific Definition of Schoolroom Ventilation

A Columbia University professor has concisely outlined the present scientific viewpoint of the conditions that constitute good ventilation, an article in the *Schoolhouse Planner* says.

"We are adapted," says the article, "to live under an air pressure of about fifteen points, with an oxygen content of approximately 21 per cent, temperature from 60° to 70° F., a moisture content varying from 40 to 70 per cent and with air in motion. We are adapted to these conditions and seem most energetic, most comfortable and most healthy when they prevail. Ventilation is the process of maintaining these conditions."

Normal air has 21 per cent oxygen and .03 of 1 per cent carbon dioxide. Oxygen may be reduced to 19 per cent and the carbon dioxide increased to 1 per cent without harmful effect, but it is practically impossible to do so even in crowded auditoriums under the most adverse conditions. The capacity of the lungs is relatively so small and the air leakage in walls so far in excess of all ordinary beliefs that neither the healthful oxygen supply is ever exhausted nor is the carbon dioxide percentage increased to the danger point. School room air at 66° to 68° F. and slightly in motion has the two essential characteristics of good ventilation.

How to Develop Nonacademic Interests for Pupils



BY HAROLD G. BROWNSON, PRINCIPAL, McLOUGHLIN UNION HIGH SCHOOL, MILTON, ORE.

I ASSUME that progressive educators no longer question the desirability of extra-curricular activities. Yet many educators do little to further such activities in their schools and therefore fail to provide for pupils some of the greatest benefits that can be derived from school membership.

Pupils are required to complete a course in geometry before graduation is allowed or for two years they must study a foreign language, when they have no interest in such subjects and in many cases know that they will never use them for any purpose whatsoever. "Such studies help to train the mind" has often been advanced as an argument or rather as an excuse for requiring them in the curriculum.

Should not the development of a sense of responsibility within the pupil and a preparation for citizenship be two of the chief aims of present day American education? Participation in extra-curricular activities has been the strong factor in developing this responsibility and in training pupils in citizenship within their school community, making the objective the teaching of pupils and not the teaching of subjects. Pupils may forget

their geometry but they must carry over a sense of citizenship and character training into life if civilization is not merely to survive, but is to prosper and develop.

The field of education has expanded rapidly during the last thirty-five years from the period of the three R's through the enriched curriculum, which included such innovations as domestic science, domestic art, manual training, music and kindred subjects, to our present status where we are beginning to place emphasis upon character training and citizenship.

There is little question as to which pupil is getting more out of his school life: the one who becomes known as the bookworm or the one who is known as the good average pupil, participating in numerous activities that develop his initiative, his judgment, his ability to cooperate with others, his responsibility and his interest in achievement. The pouring in process, wherein theorems in geometry are memorized and the pupil recites his lesson day in and day out with a feeling of thankfulness that "that's over," is not providing the pupil with something of value to carry over into life after school days.

In an attempt to place extra-curricular activities upon a more substantial and tangible basis and to raise them to the plane of certain required subjects, a plan was worked out in the high school at Raymond, Wash., a plan making one extra-curricular activity unit necessary for graduation. Previously sixteen units or thirty-two credits were required. This activity credit was made an extra credit requirement, bringing the total up to seventeen units or thirty-four credits. It might be well to mention that these activity credits could not be presented in lieu of subject credits, and that since the plan was experimental when it was introduced it was deemed advisable to maintain previous standards as to subject credits, and simply to add the activity requirement to the existing requirements for graduation. Requiring this additional unit necessitated the working out of a plan whereby each pupil in the high school (the enrollment was approximately 350) could participate in enough activities during his high school course to obtain the necessary credit to graduate. In February, 1926, the following bases were first determined upon for the regulation of activities and the granting of credits:

How Activities Are Regulated

1. The extra-curricular activities listed below shall be accredited as those that may entitle a pupil to activity points.

2. Twenty points shall entitle a pupil to one activity unit applied toward graduation.

3. One activity unit shall be the maximum applied toward graduation, but any number of additional credits or points may be earned.

4. Three activities is the maximum at one time for which credit will be given.

5. Participation each semester in some of the activities listed below is required of all pupils.

6. Pupils must register for activities that will give them five points at least each year.

7. Activity points must be earned in more than one activity.

8. Mere participation in an activity does not warrant credit. Credit will be awarded at the end of the semesters and only upon recommendation of the faculty adviser responsible for the activity in which the pupil participates.

9. Credits will begin to be earned immediately.

10. (a) No "activity credits" will be required of pupils graduating in May, 1926; (b) one-fourth activity unit will be required of pupils graduating in May, 1927; (c) one-half activity unit will be required of pupils graduating in May, 1928; (d) one activity credit will be required of

pupils graduating in 1929 and thereafter. (This permitted the gradual installation of the plan.)

11. Pupils may petition for points in activities not here listed, such as Sunday school teaching or attendance, choir work, office work or clerking. This list may be added to from time to time.

12. If for any reason a pupil is physically incapable of earning the required number of points the faculty may reduce the number if it feels that the pupil has earned the maximum number of points that his ability permits.

Extra-curricular activities with corresponding credits earned per year (as planned in February, 1926) are as follows:

Glee Club	5
Choruses	5
Band	5
Orchestra	5
President of Student Body	3
Athletic Manager	4
Member of Torch	1
Member of Pep Club.....	1
Editor of Annual	5
Manager of Annual	4
President of G. R. H. S. Clubs.....	2
Student Body Treasurer	5
First Team Athletics	4
Second Team Athletics	2
Debate	5
Friendship Com. of G. R. Club	1
Member of Dramatics Club	1
Member of French Club	1
Executive Council	2
Music (outside of school)	6
(Standard of one-hour lesson a week with two hours of practice a day. Credit for less given in proportion.)	
Boy Scouts	2
Hi-Y Girls	2
Hi-Y Boys	2
Yell King	3
Song Queen	3
Doughnut League (for each sport) ..	1
Interclass Athletics	1
Interclass Debate	1
Interclass Rivalry Committee: Chair-	
man	2
Member	1
Plays	2

To determine an activity credit one must fulfill the following requirements:

a Attendance: The pupil must attend at least two-thirds of all the meetings of the organization; no excuses will be accepted. This includes both business and social meetings.

b **Participation:** The pupil must cheerfully accept any reasonable responsibility placed on him by persons in authority and must make an honest effort to be successful in carrying out this responsibility. This includes programs, public appearances, committees of all kinds, offices and social affairs.

c **Conduct:** The pupil's conduct must be such that in the opinion of the adviser, it does not interfere with the proper functioning of the organization.

d **Dues:** The pupil must pay dues and special assessments promptly.

e **Any other basis for giving activity credit shall be subjected to the approval of the faculty.**

By the above plan participation in some of the school activities was re-

group and the school facilities to carry out such a program. It was the belief of the sponsors of this program that by this means of having small groups of pupils working upon school service projects, a large number of those who have not formerly been or would not ordinarily be found in activities would be brought into them naturally.

In the high school there were about fifteen different clubs, among them the dramatics club, the French club, the science club, the glee clubs, the Hi-Y, the Campfire girls, the Torch Honorary Society, the Quill and Scroll. From each of these clubs there were elected two members, one boy and one girl, to what was known as the Hub Club. In organizations made up of all boys, two boys were elected to representation on the Hub, and two girls were



The staff of the Mac Hi Messenger, McLoughlin Union High School, at work.

quired; credits were to be earned over a period of at least three years but no more than one-third of them could be earned in any one year; standards were set up so that without the approval of activity advisers credits could not be given, just as without the approval of the teacher passing grades are not given in any of the curricular subjects.

The problem arose, however, of providing enough activities. Each school, of course, has activities peculiar to its own needs and environment as well as activities that are almost universally in vogue, such as debate, dramatics and glee clubs. To provide a sufficient variety of activities and to keep all the pupils busy, the Kiwanis idea of a service club was seized upon, adapted of course to the needs of the juvenile

elected to represent the all-girls' clubs. This Hub Club took form from the Kiwanis system. Just as the Kiwanis Club draws two members from each profession, the Hub Club was to draw from each school organization two members to act as its representatives in this service club of the high school. A provision was made whereby an ineffective representative would have to be replaced by the club, upon recommendation of the Hub Club. Further, in order to avoid competition with or duplication of effort in the regular student body organization and to assure perfect cooperation with that body, the president of the associated student body was made ex-officio chairman of the Hub Club. This arrangement proved a happy solution, since the Hub Club was destined to be purely a service organization and not gov-

ernmental or administrative in any of its ways.

Assuming again the character of the Kiwanis, the Hub Club held meetings weekly with business meetings every other week and on the alternate weeks, luncheons in the school cafeteria, when the programs were arranged by the dramatics club and the decorations and the favors were provided by the art club.

The membership of the Hub was divided into committees to sponsor service squads, such as the fire squad, the ticket squad, the assembly squad, the campus squad, the pep squad, the traffic squad, the publicity squad and the community relations squad. This apportioned about two or three members to each committee.

The entire high school was divided into the Boys' and the Girls' Leagues, and from the membership of these two organizations the Hub committees were to go out and get members for the particular squads for which they were responsible. To provide adequate faculty supervision, the faculty as an organization was entitled to elect two members, a man and a woman, to the Hub Club and these faculty representatives were ex-officio advisers to one-half the squads each, but for supervising actual projects they were privileged to appoint "proxies" from the faculty.

Appointment upon a certain squad was not necessarily permanent and reward for work done while on a squad was made upon the basis of ten hours' work being equal to one activity point. In this manner many pupils who otherwise were not brought directly into extra-curricular activities were asked to assume responsibilities, possibly in minor rôles, but at least in ways to pique their interest and arouse them to further participation.

Timid Pupils Are Helped

The great problem faced by to-day's educators in regard to all extra-curricular activities is that of reaching the shy, bashful youth who may have potentialities and yet who is afraid to speak up. When such a youth is brought into committee work with others his interest is frequently aroused. He begins to become interested in taking part in other school affairs and in working with pupils in other ways. If, however, he should be the type of pupil that does not ordinarily care for activities, he is still able to get his credit by doing things that may be somewhat routine and yet are service activities, teaching citizenship and cooperation with his fellow school citizens.

To prevent a pupil from "belonging" to too many organizations and to encourage him to concentrate upon one project at a time, as well as to give time for the carrying out of these many service activities, a schedule was inaugurated

with this system, whereby a regular activity period was provided twice a week, this coming immediately after the noon hour, a time in which it seems difficult to pursue to advantage the curricular studies.

The plan of the Hub Club and the plan of requiring credit for extra-curricular activities for graduation have been in operation for three years. The superintendent of the school system who was there at the time they were put into effect and who is still there reports them successful.

Dangers That Must Be Avoided

It seems that two dangers arise from these plans which must be watched and regulated if possible. They are (1) the tendency of the pupil to adopt a class attitude and (2) the tendency for the pupil to work for credit rather than for benefit and service. It surely is the responsibility of the administrator and the activity advisers to create the right attitude and to build up interest in and enthusiasm for participation in these activities. It is the natural thing for pupils to want to participate in school affairs, to want to work with others, to want to attract attention, to want to gain recognition, to want to be popular. The plan seems to provide a splendid solution for the problem of bringing together widely differing racial, social and intellectual groups. The school in which it was adopted is made up of pupils of many different nationalities and of widely separated environments. One of the faculty reported to me that in one rather large French class there were sixteen different nationalities represented and that the pupils could speak as a mother tongue almost as many languages.

During the three years in which the plan has been used, a slight reclassification of the activity credit has been made. It is now divided into six branches: (1) service, (2) citizenship, vocational, (3) honorary, (4) special interest, (5) competitive and (6) administrative. Therefore pupils may get credit toward their activity unit in many different phases of pupil participation. The credits are now arranged as follows:

1. Service: (a) Hub members, 2 points; (b) Hub chairmen, 3 points; (c) plays, 2 points; (d) managers and chairmen of class functions, 1 to 3 points; (e) dean's assistant, 2 points; (f) stage managers, 4 points.

2. Citizenship and Vocational: (a) Hi-Y, 3 points; (b) Campfire, 3 points; (c) Boy Scouts, 3 points; (d) vocational conference groups (one meeting per week), 3 points.

3. Honorary: (a) Torch Society, 1 point; (b) Quill and Scroll, 2 points; (c) Forensic League, 1 point.

The Mac Hi Messenger

Published by the Students of McLoughlin Union High School

VOLUME IV

MILTON-FREEWATER, OREGON

TUESDAY, OCTOBER 15, 1929

NUMBER 2

MEANS FOR FINANCE OF PAPER DECIDED

MUSICAL ENTERTAINMENT TO SUPPLY FOR MEANS

Faculty Will Not Support This Year

The faculty, at its meeting last week, voted to discontinue its production of a paper for the support of the Messenger. Some other means must be found to supply the paper. The Messenger will be financed by the proceeds from the musical entertainment. In previous years this fund went toward helping to publish the Oregon Trail.

The money obtained from subscriptions will not be used for the purchase of new type, but will also go towards financing the paper. The new type will be purchased during the course of the year and will be paid for by the different organizations which they advertise.

Although a faculty play has been generally hoped for, the faculty feels that this plan is much more advisable since it will mean much less work for those who give the play, and the responsibility will be on the Messenger.

The committee on the first musical entertainment, which was last summer, is now working on the plan to publish the paper. The committee is now working on the plan to publish the paper.

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Public Speaking Attracts Many of Mac

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PRINCIPALS' CONFERENCE TO BE HELD THIS WEEK

A conference of high school principals will be held in Salem on Friday and Saturday of this week. The program will be supervised by Messrs. G. W. Patterson and State Superintendent Howard. Reports of the principals will be taken up by the committee on the Oregon Trail.

The money obtained from subscriptions will not be used for the purchase of new type, but will also go towards financing the paper.

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CLARE VAUSE
Editor

OLINGER BECOMES STUDENT PRES

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HEY BOYS USHER AT EVANGELISTIC MEETING

The Hey boys of Star Hi have assumed the major responsibility of ushering on Friday and Saturday nights at the evangelistic meetings now being held at the Maple Grove building at Freese.

Friday, October 4, the Hey boys were on duty and ushered the meeting. The Hey boys were on duty and ushered the meeting.

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GLEE CLUBS TO SPONSOR CONCERT

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These budding journalists may devote enough time to their school paper to make it up-to-date in every way, for the hours they spend in such work are counted as actual credits toward graduation. This is only one of the many extra-curricular activities for which this school gives credit in its effort to train its pupils to develop a sense of responsibility and to prepare for citizenship.

4. Special Interest: (a) French Club, 1 point; (b) Dramatic Club, 1 point; (c) Home Economics Club, 1 point; (d) music, (one-hour lesson and six hours' practice per week), 6 points. (A smaller number of points may be earned in this. Chorus, band, orchestra or glee club subject credits may, if necessary, be converted into activity points not to exceed 7 per year.) (e) quartets, 2 points; (f) freshmen athletics, 5 points. (No more than 5 of the 20 points may be earned in this division.)

5. Competitive: (a) high school debate, 4 points; (b) athletics: first team (per sport), 4 points; second team (per sport), 2 points; (c) interclass contests: athletics (per sport), 1 point, debate, 2 points; (d) Doughnut League (per sport), 1 point.

6. Administrative: (a) student body presi-

dent, 3 points. (As chairman of the Hub, add 3 points.); (b) vice-president of the student body, 3 points; (c) secretary of the student body, 3 points; (d) financier of the student body, 5 points; (e) athletic manager of student body, 5 points; (f) class representative on executive council, 2 points; (g) Yell King, 3 points; (h) Song Queen, 3 points; (i) interclass rivalry: chairmen, 3 points, committeemen, 1 point; (j) class officers: president, 2 points, other officers, 2 points; (k) annual staff: editor, 5 points, manager, 4 points; (l) newspaper staff: editor, 5 points, manager, 3 points, circulation manager, 2 points, advertising manager, 2 points; (m) club officers: president, secretary, treasurer and program chairmen, 1 point; (n) wardrobe mistress, 3 points; (o) debate manager, 2 points. (Not more than 7 points may be counted in one year.)

As an illustration of how extra-curricular activities may be emphasized without sacrificing scholastic standards, permit me to refer to the school of which I am now principal. We thoroughly stress extra-curricular activities. Each teacher in the school is adviser for or sponsors some activity, such as a club, dramatics, debate, athletics, newspaper and annual. We provide an activity period in the regular daily program of the school at which time all meetings of organizations, classes or clubs may be held. I have found that there has been great demand for this period. This year I arranged the yearly calendar to include not only the major events of the school year but also the dates of the regular meetings of organizations. The honor society, Campfire, Hi-Y and student council each knows its meeting dates for the year when school opens.

How One School Succeeded

Our school has gained recognition in the state for leadership in these various activities, winning championships or being among the upper two or three schools in many of them. In the last three years our annual won first place in the state twice and our newspaper won honorable mention in the state contest. Our debaters won the Eastern Oregon championship and were second in the state. Our basket ball team won the district championship twice and thereby gained the right to participate in the state tournament. Our football team won the Eastern Oregon championship twice.

During the same time our school, according to the English entrance examinations given at the state colleges, has raised its scholarship rating from ninth to fifth to fourth in the entire state. Furthermore, year before last our school was the only school and last year one of three schools in the state outside of the city of Portland, to win a place in the state division of the National Chemical Essay Contest. Each year one of our pupils won a first prize and another won second place. Thus we see extra-curricular activities have been encouraged and developed to the point where they have gained state recognition and yet scholarship has not suffered. On the other hand, our scholarship standing has risen.

It seems that extra-curricular activities can be introduced into the school and can be made a vital feature in the development of the men and women of to-morrow. If we reduce some of the other requirements, such as those for mathematics and foreign languages and substitute such activities as these, pupils will acquire training in citizenship and character development which can be carried over into life.

The Value of Home Economics to High School Girls

It is now conceded by a great number of schools that home economics gives a better balance to high school education because it supplements and strengthens the valuable training that has already been developed through the use of books and sends pupils out of school with a better mental equipment for their share in the responsibility of the community.

According to the Bureau of Education, one way in which home economics makes a definite contribution to the high school health program is through the application of proper nutritional principles in the school cafeterias and lunch rooms where the daily menus are planned to fit the health needs of the pupils and teachers as well.

Home economics also provides an excellent background for service in the nursing profession. Every hospital needs trained dietitians, and hotels, boarding schools and summer camps make use of the services of women with such training. Catering, restaurant service and the management of lunch rooms in schools, business and social organizations offer possibilities of profitable employment to food specialists. Salesmanship and executive positions in mercantile, women's wearing apparel and house furnishing establishments suggest other fields of useful service for high school graduates with satisfactory home economics training.

Should College Entrance Requirements Be Abolished?

If all college entrance requirements were abolished, would all standards of work in the high school be destroyed and would important fields of study be neglected? This question is asked in a recent number of *School Executives Magazine* and answered as follows:

"If all subject matter requirements were removed, the best secondary schools would not only do as good a job as they are doing now, but an immeasurably better one. They would be left free to adapt their programs to individual needs and this would make all the difference in the world. Educational guidance would take on an entirely new significance and importance. Experimentation would spring up on every hand. High schools would vie with one another in the reorganization of their courses of study and methods of teaching. There would be a renaissance in secondary education."

Child Accounting Laws in Ten States and How They Function

A study of 375 items in the laws of ten Midwestern states discloses the fact that child accounting as a state function is apparently in its infancy

BY JOHN GUY FOWLKES, PROFESSOR OF EDUCATION, UNIVERSITY OF WISCONSIN

MUCH emphasis and attention have been directed recently toward the problem of child accounting and the necessary procedures for such accounting. As in the case of financial accounting, many systems of child accounting have appeared. In some instances scientific accounting will be found only if statutory provisions make such accounting compulsory. Such being the case, the need for an analysis of existing child accounting laws with resulting recommendations is evident.

The following report furnishes an analysis and comparison of the child accounting laws of ten Midwestern states—Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, North Dakota, Nebraska, South Dakota and Wisconsin.¹ The only study of a similar nature is that published in 1925 by Arch O. Heck of the Bureau of Educational Research, Ohio State University, in which he includes tables covering some fifty-three general items found in the school laws of the forty-eight states. The law books he used date from the year 1921, through the year 1924. Although the study here presented is limited geographically, it is intensive in that it includes more than 375 child accounting items.

Definition of Terms

The terms used may be defined as follows: "Statutory" pertains to laws laid down by the legislature; "child accounting" includes anything pertaining to the keeping of records of preschool children, records of children during their school life and records of children after they have left school.

Inasmuch as education is generally recognized to be a function of the state, this study was made to determine to what extent the states mentioned have made statutory provisions relative to child accounting. The findings for the several states are compared and an attempt has been made to point

out their advantages and limitations. In addition to drawing conclusions, the study also makes general recommendations for an ideal statutory control of a uniform and complete child accounting system.

Why Records Should Be Kept

Arch O. Heck, Ohio State University, in his publication, "A Study of Child Accounting Records," lists various definite reasons why such records should be kept. He contends that accurate records tend to increase the administrative efficiency of the school system in that they are of inestimable value in the consideration of questions relative to compulsory attendance, school expansion, the organization and maintenance of special classes for subnormal and defective children and the amount of retardation and pupil elimination. He further urges the adoption of child accounting records by virtue of the fact that general business procedure finds such practice absolutely necessary. Merely because the money for school support is provided by the general public is no reason why school officials should be allowed to be any less diligent than business officials. Accompanying his remarks on general business procedure, he emphasizes the following basic business principles: Checking the efficiency of employees is comparable to checking teachers; reports made to stockholders of a company are analogous to the reports made annually by schools to which the general public is entitled.

As a third argument in favor of an adequate child accounting system, Mr. Heck points to the generally accepted principle that education is acknowledged as being a state function and, this being true, he predicts that the state will never operate properly until reliable and comparable data from all school districts of the state can be secured. His recommendation is that, for comparative purposes, there should be uniformity of terminology and uniformity of records. In addition, he points to the psychological justification

¹Acknowledgement is made to Otto H. Richter, a graduate student at the University of Wisconsin in 1928-29, for the statistical work involved in this study.

of records, saying that they provide a teacher with facts regarding the native individual abilities and past experiences, achievements and interests and health of his pupils, and that effective teaching results.

With specific regard to the great necessity for uniformity in child accounting, there are listed in

Sec. 1108 (Supt. of pub. instruc.) ° N.D. 1927

He shall prepare, cause to be printed and furnished to the proper officers or persons all district clerks' record books and warrant books, school treasurers' record books, school register, reports, statements, notices and returns needed or required to be used in the schools or by the school officers of the state.

.....

Fig. 1.

the handbook, "Child Accounting Record Forms for Schools,"¹ eleven definite advantages of uniform child accounting, some of which are: Records provide a complete school history of each pupil; continuous and permanent school records are available; pupil records may be easily transferred; effort and achievement of the pupils are recorded; cards are standard in size, texture and form and are easily filed; the grading system in all public schools will be the same.

McAllister and Otis in "Child Accounting Practice" indicate that in order to inform parents, boards of education, superintendents, principals and teachers as to how well the school is contributing to the education of each individual child and how fully each child is recognizing his opportunities, a child accounting system must be used. In referring to a method of recording information, the authors stress the importance of utilizing such a method with specific respect to the following items: the determination of the mental capacity of the child to profit by instruction; the grade placement of the child in accordance with its capacity to learn; the health of the child; degree of school attendance of each child each year;

101—C and C¹

School Register Form is prepared by the state superintendent of public instruction.

¹ Wis. ° N. D. ° Neb. ° Minn. ° S. D.

Fig. 2.

pupil punctuality; pupil achievement; degree of character development.

Arthur B. Moehlman's publication, "Child Accounting," contains the following definition of the subject: "Child accounting is the recording of all

activities, instructional and executive, that are necessary in the keeping of the essential records of the individual child during his school life." It is interesting to note that Mr. Moehlman considers but one period of the child's life, that of his school life. As shown by the definition appearing at the beginning of this discussion, this study considers three periods, namely, the preschool period, school life and the follow-up period after the child has left school.

Throughout this study the inspection type of technique was coupled with a triple system of recording data. The procedure was as follows:

1. The most recent school law books of the states studied were carefully read. Seven of these were 1927 publications and three were 1928 revisions.

2. Each section or subsection pertaining to the investigation was copied on a card. Reference

101

School Register:

- A. Compulsory
 - A.¹ Compulsory for private and other schools, etc.
- B. Penalty for neglect is specific
- C. Prepared by the state superintendent of public instruction
 - C.¹ Prepared by state commissioner of education
- D. Form indicated in the school law
- E. Furnished by:
 - 1. District clerk
 - 2. District board
 - 3. School directors
 - 4. Purchased by county superintendent for each school district
 - 5. State commissioner of education through county superintendent
- F. Examined by:
 - 1. District board
 - 2. County superintendent
 - 3. Open to public inspection at all times

Fig. 3 (Portion of Notebook).

numbers to these various sections were also recorded. (See Fig. 1.)

3. As the reading of the school law of each state was completed, the cards containing the excerpts were reread and a new card was made for each item found thereon. Only one item was placed on a card. (See Fig. 2.)

4. Simultaneously each item was recorded in a large notebook and given a number or a number and a letter, such as 108, "School register is compulsory," or 108A, "School register is compulsory for private, denominational and parochial schools," which was also placed on the card con-

¹Fowlkes, John Guy, University of Wisconsin.

taining the single item. Fig. 2 and Fig. 3 illustrate this procedure.

5. On this same card the name of the state having statutory provision for the particular item was recorded and given a number, such as 1, 2, 3, 4, which corresponded to the number placed on the original card bearing the excerpt from the law. This is shown in Fig. 2. This triple system of recording to a large extent eliminated the possibility of any serious error or omission due to the loss of a card or cards.

6. All items found were then classified and tabulated.

7. To ensure further accuracy in the work, the provisional items for each state were typed and sent to the respective departments of public instruction for additions or subtractions. All of these were returned, with the exception of those for Iowa.

Because it will be impossible to give here a detailed interpretation of each of the 375 or more items listed in the tabulations, only the main divisions and a few of the subdivisions will be considered.

School register: Nine out of ten states make the keeping of a school register by public schools compulsory, while only one state makes it mandatory for private, denominational and parochial schools to keep a school register. Six states make provision for a specific penalty for failure to keep the school register according to statute. Apparently compulsion is weak at this point. In six states the state superintendent of public instruction sets up the form of the school register. Only three states have any legal requirement with regard to the examination of the school register. Out of twenty-eight items found in the various school registers of the ten states studied, agreement to the extent of approximately eight states out of ten in only three of these items was found. As evidenced by this disclosure, uniformity in the keeping of school registers is a feature that is unheard of at the present time.

Present Condition Is Chaotic

Register and other reports: A glance at the scatter of the check marks on the tabulations covering these items indicated but little uniformity among the states studied. Upon a more careful examination, these tabulations covering register report compulsion, high school reports, penalties for neglect of such reports, forms used, examination and filing of reports and the source and destination of reports show that in some cases only two out of ten states have any statutory provision and, in many instances, only one of the ten states made any specific demand of the schools with

regard to the items listed here. The present condition is nothing short of chaos.

School census: A definite form for taking the school census is provided in nine out of ten states, and a penalty for neglect to take the census is specifically stated by eight states. Other items such as examination of the census, census enumerators, filing, copying and sending copies of the census vary from state to state. Practically no congruity is in evidence. With regard to information listed in census taking, nine states have similar legal provision for one item, six for two other items and from one to four, mostly two and three, states agree on the remainder of the twenty-two different items listed.

Little Provision for Handicapped Children

Census of retarded children: Only one state, South Dakota, makes any legal provision for the care and education of such children.

Census of deaf and dumb children: Six states have made definite statutory provision for children thus handicapped.

Census of crippled children: Only three out of ten states have deemed the crippled child problem of sufficient importance to establish specific statutory provisions for the same.

Census of blind children: It is gratifying to note that, with the possible exception of three states, the census and care of blind children have given the state departments of public instruction some concern. The wide scatter of the provisions shows that the variance between states interested in this problem is great. In only two items of census information is there anything in the way of agreement and that only to the extent of six and seven states respectively.

Census of feeble-minded children: Six out of ten states ignore the problem of feeble-minded children as far as the provision of statutory control is concerned.

Special schools for deaf, dumb, blind and otherwise defective children: Reports concerning such institutions and classes are required by law in but three of the ten states studied. Thirty per cent is indeed a poor indication of the fact that the education of its defective citizens is a state function.

Physical examination: Five states have established statutory provisions for physical examinations. Records are required in all of the five states but in no instance is the physical examination compulsory.

Dental examination: Some of the states having statutory provisions for physical examinations have in a general way included a superficial examination of teeth. However, only three states have

made definite provision for conducting dental examinations in the schools.

On the basis of the consistent lack of laws and the incongruity of existing laws pertaining to child accounting in the ten states studied, further investigation of the remaining thirty-eight states is recommended.

It is further recommended that uniformity of terminology and record forms be adopted by all states.

It is also advised that a complete survey of child accounting laws result in recommendations for a countrywide adoption of laws governing such activity.

It is further recommended that upon the adoption of such laws by the states, state compulsion with regard to these laws should be instituted.

Uniform System Is Recommended

As a direct result of this study, it is recommended that a countrywide state adoption be made of a child accounting system for both normal and defective children with regard to the following records: a school register; a continuous census record for the superintendent's office; entrance, transfer and promotion cards in triplicate, for teachers, principals and superintendents; standard report cards for elementary, junior high and senior high schools, in duplicate for small school systems and in triplicate for large school systems; permanent school records for schools, in duplicate for small school systems and in triplicate for large school systems; standard individual ability and achievement records, in duplicate for small school systems and in triplicate for large school systems; physical and dental records, either separate or combined, which will follow the pupil from school to school, or from community to community, together with the other records mentioned.

In the event that a complete survey is made of the statutory provisions relative to child accounting in the forty-eight states, it will then be possible to draw up in detail the material to be included under the main divisions mentioned in the foregoing recommendations. Until then, suffice it to say that the investigation discussed in this article has disclosed the fact that child accounting as a state function is still in its infancy.

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How Farm Work Affects the Education of Rural Children

Agricultural pursuits engaged in by American children of school age interfere with their school attendance, according to a statement of the Children's Bureau, Department of Labor. The 1920 census disclosed that 1,058,666 country children between seven and thirteen years of age, including children living in communities with a population to 2,500, were not in school. From the investigation recently completed by the bureau in respect to children engaged in agriculture, it was found that the average rural school term in the United States in 1924 was nearly seven weeks shorter than the average city term.

Children who must sacrifice a certain amount of time to such emergencies as bad roads and bad weather, as country children always do, run on a very narrow margin when the term is only six or seven months, and they stay out of school a month or so to help on the farm.

Normal progress in school is dependent on regular attendance, so that children who habitually stay out of school for farm work fall behind in their classes. Besides the actual loss of time some children working on farms are too tired and listless, according to their teachers, to do the required work when they return to school and their scholarship suffers.

What Does a Physical Education Program Consist of?

"An up-to-date physical education program does not consist of old fashioned drills and exercises," James E. Rogers, director, National Physical Education Service, told the delegates to the National Education Association Convention in Atlanta, Ga., in an address. "It consists rather of sports, rhythms, play and recreation. Health habits are taught and hygienic living is practiced. The purpose of modern physical and health education programs is to promote the joy of achievement, the spirit of sportsmanship and the satisfactions that come from healthful living."

Mr. Rogers pointed out that thirty-six states representing 90 per cent of the population of the country have physical education laws, thirty-one states representing 80 per cent of the population have state programs of physical education and twenty states representing 60 per cent of the population have state bureaus of health and physical education in the state departments of education.

The Teacher: the School's Envoy to the Public

The effectiveness of public education depends to a great extent upon the contacts of the teacher with her pupils and with their parents and upon her social and civic activities

BY ARTHUR B. MOEHLMAN, PROFESSOR OF ADMINISTRATION AND SUPERVISION, UNIVERSITY OF MICHIGAN

PUBLIC education under a democratic form of social organization has two functions.

There must be a transmission of the social heritage and also a technique for variation from the social inheritance. Both functions should be a conscious and purposeful part of the teaching process. When this technique is completely successful, each individual will be trained to develop his inborn capacities to the greatest extent possible that he may contribute largely to the welfare of the group.

Our social organization is dynamic not static. Each generation, through the acceptance of individual and group contributions, adds something to the cultural development of the race. This modified and expanded heritage becomes the basis for teaching the succeeding generation. In like manner the problems of current life, rapidly changing or arranging themselves into new patterns, also change the requirements for individual training. We can no longer look upon public education as something fixed and permanent so far as method or content is concerned. We must consider public education in the present only and realize that it is subject to change as new evidence, developed as a result of experimentation, is presented.

The greatest difficulty confronting public education in each generation has been to make this adjustment from the old patterns to the new. One of the functions of institutions is to conserve, and public education has been no exception to this rule. Teachers as a group are unusually conservative. Their outlook has been academic rather than dynamic. Compared with the scientific and progressive spirit shown in business, public education appears to be standing still and

looking to the past rather than to the present and future for inspiration. The responsibility for this attitude and these practices lies in the nature and organization of our institutions. It is essentially a fault in basic philosophy and in our concept of organization. Unless institutions are motivated and permeated by a wholesome philosophy of purpose, based upon the objective findings of science, and unless they make definite provision for growth, they tend to become static and rigid. This rigidity and inertia are deadly. Every new concept and ideal must not only prove its own value but must also overcome the deadening weight of tradition and accepted routine.

A valuable contact is made when Mother is introduced to the teacher.



Unless public education accepts the foregoing implications of purpose and prepares itself definitely to meet new needs and new problems as they arise, it will within a relatively short time become of so little value to society that only a complete and expensive revolution in method and practice will again make it truly functional. One of the serious problems confronting the teaching profession to-day is how to develop ways and means of overcoming social and institutional lethargy. The solution of these problems requires first of all an understanding of the social and legal nature of public education and the manner in which change normally occurs.

The General Educational Plan

Public education in our governmental concept rests upon the will of the people. A feeling of need was developed early in our history, and the will of the people was expressed in constitutional enactments that authorized the legislature to provide ways and means for satisfying the need. Legislatures have enacted the will of the people into statutes that are known collectively as the school code. In these plans, the execution of the program has been delegated generally to local corporations known as school districts.

The general educational plan may be considered in two divisions. First of all, there are mandatory laws governing the execution of the minimum program that is considered essential to the well-being and safety of the state. Since all local needs within a given state are not the same, a second group of permissive laws has been promulgated, which gives to the local district the right to engage in further activity in accordance with the ascertained needs of the particular district. Beyond this specific permissive legislation, general permission is given to carry on activities that are considered necessary but that may not have been existing or foreseen at the time the laws were passed. The legal purpose is to develop flexibility by this method.

In practice, public education within any state represents a series of levels, both in extent and in quality. Certain sections carry on the minimum mandatory program. Other districts accept the permissive legislation over and beyond the basic program. Still others are engaged in an experimental trial of the activities and practices not specifically mentioned in any of the enacted legislation.

Since the power to make policies or plans, to appraise their value and to rebuild these plans rests upon the will of the people as expressed through their representatives, the legal power of the professional educator in the field of policy

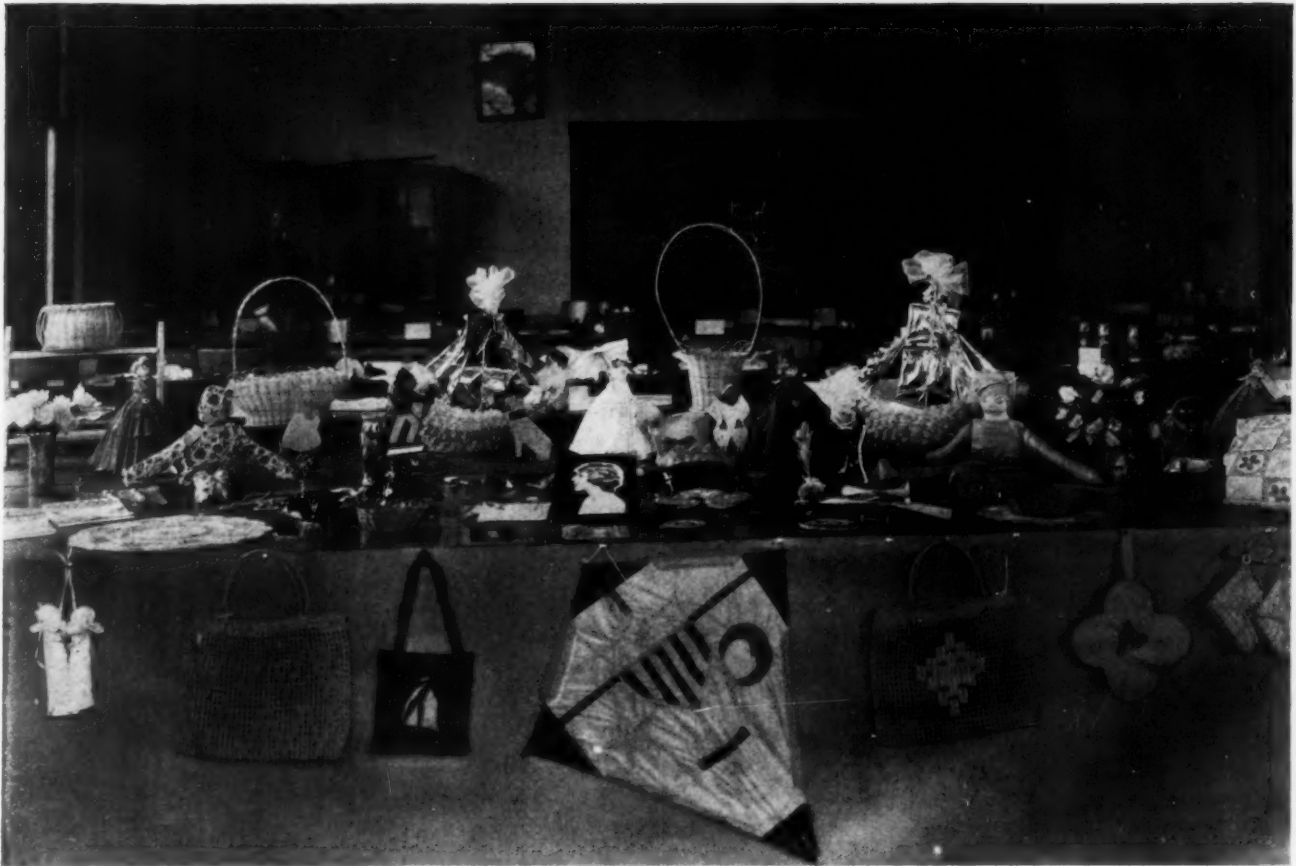
making rests upon his relationship to the general social group and upon the direct or indirect influence of his leadership. Legally, neither teacher, principal nor superintendent has any direct authority in the legal development of plans, except as he is a member of the social group.

Changes are constantly being made in our educational plan. In some localities, these are more rapid than in others. The rate at which changes occur depends upon the need and upon the character of the organization. In general, changes take place in the following manner. Changing conditions of life result in changed needs. Recognition of new needs is usually first made by industrial, financial, religious, social or educational leaders. Such early recognition usually is subjective in type. Discussion follows discovery. This is a process of informal education. At first the new implications are questionably or indifferently received. Constant reiteration finally gains negative acceptance. Certain more adventurous professional leaders in higher institutions or in public education begin cautious experimentation. These experimental results engender further discussion. Public leaders begin to accept, and with their acceptance they bring pressure to bear upon the social institution through organized small group opinion. Gradually, cautiously, sometimes quite imperceptibly, experimental trial is made. Each experimental effort brings further change, further modification and more discussion. By direct and indirect means, popular acceptance of the new need is established. From this point on expansion is rapid. When the need develops to the point of general social acceptance, it becomes an accepted part of the social program.

How Changes Occur

Legally, the procedure parallels the outlined development. Authority for early experimentation is given through the general implications of permissive laws. The second stage is social acceptance to the extent that specific permissive legislation is enacted. At this point, the more conservative communities, fortified by the authority of the specific permissive enactment, also proceed to experimental trial. Finally, the general social acceptance of the basic necessity of this particular need leads to the enactment of a statute making the practice mandatory upon all. The result may be the enriching of the existing curriculum or the extension of the time period. Mandatory legal enactment should wisely follow wide general acceptance rather than precede it.

The cycle from the initial recognition of need to its final incorporation as a part of the minimum social program may take a short or long



Periodic exhibits of their pupils' handiwork offer the teacher an excellent opportunity for contact with the parents and the public.

period, depending upon the character of the need and the quality of social leadership. It may require ten or fifty years, according to the nature of the project.

A careful analysis of the history of public education in this country indicates that most of the changes that have come about have not had the cooperation of the institution but have been forced upon it from the outside. A few examples will suffice to illustrate this point. Prior to the Civil War, American history was not generally taught in the elementary schools. The great sectional conflict developed a need for this subject. Pressure from social and political leaders forced it into the curriculum. By 1875, elementary history had been generally accepted. Little aid was given to this movement by educational leaders. School principals and teachers in many sections loudly condemned the innovation. Such hackneyed terms as "frill," "fad" and "extravagance" were hurled against those who desired to add history to the curriculum. The conservative spirit and the institutional inertia were serious difficulties in the way of change. Instead of a general attitude of interested cooperation and impartial trial, highly emotionalized antipathy met the innovators. The history of physical training, music and the kindergarten is similar.

Careful study of our educational history leads inevitably to the conclusion that in the past the teaching profession generally has been unduly conservative and traditional in outlook, that public school organization has tended to resist essential social change, that our leaders have not been serious enough students of sociology, political science and philosophy and that the teaching profession has not made the most of its opportunity for creative leadership. Naturally, there are many exceptions to these generalizations. Public education has produced many able and progressive leaders, but the implication that the profession generally has failed to live up to the type of constructive leadership that might be expected from so highly selected a group is nevertheless true.

Creative Leadership

Public education rests upon the will of the people. Its character will be determined by the feeling of need that citizens show and by their understanding of its worth and value. The ability of the people to understand and to appreciate will depend upon their cultural background, their educational level, their religious belief and their ability to look forward to the welfare and needs of the oncoming generation. The natural tend-

ency of the average adult is to think in terms of the past and to enrich that past with the softening haze of memory and to consider it the ideal. The golden age is always in the past. It is only through continuous education that group understanding, sympathy and active support can be enlisted.

Problems Grow Increasingly Complicated

The cloistered attitude of the teaching profession in the past has no place to-day. Changing conditions have brought increasingly complicated problems. The old cultural solidarity has been broken. The composite culture of the future is in the process of making. The increasing complexity of modern life, the increased range of public activity, the factor of size, of religious, educational and basic cultural differences, without any corresponding enlargement of constructive facilities for community education, have brought with them extremely complicated problems that never existed in the past. It is no longer possible to count upon tacit general acceptance of change. It is no longer possible to consider unified reaction to plans that may run counter to diverse cultural backgrounds. Unless a definite educational agency is created to meet these new conditions, it will be increasingly difficult for the institution of public education. The era of the *laissez faire* policy of professional indifference rightfully belongs to the nineteenth and not to the twentieth century.

We have also seen that the tendency of social institutions is to conserve, to crystallize and to become static. It has also been indicated that the great need of our dynamic social order is for dynamic institutions that will consider adequately present day problems, that will be able to use intelligently the achievements and the solutions of problems in the past and that will consider and prepare for the solution of ascertainable future problems by developing a technique of making social changes. The efficiency with which our institutions will function will depend upon the effectiveness of the means of continuous education not only of the children but of the adults as well. Who shall furnish this education?

Who Is Responsible?

All institutions and social agencies have a definite responsibility and a share in the solution of this problem. It is our firm belief that the greatest responsibility for creative leadership rests with the teaching profession itself. Teachers should be familiar with the great social problems of the day. Each teacher should be thoroughly

trained in the social sciences and should recognize to a much greater extent than ever before the responsibilities as well as the privileges of her profession. No individual or group is better able to develop method and technique for educating the public. If the profession itself is not conscious of its legal and moral obligations to furnish creative leadership to the people, what may be expected from the outsider who has generally only an academic or passive interest?

If a community is given definite information about what is happening in the schools, what desirable changes may be effected in the children and what the purpose of the school is, its attitude changes to one of greater understanding, appreciation and, finally, to one of active, aggressive support. The quality of education in the last analysis will be determined directly by the quality of educational leadership and by the professional spirit and attitude of teachers. This means that every professional organization in every school community is definitely responsible to the public for continuous education. It means that a continuous program of child and adult education, in which every professional and nonprofessional agent participates, must be carried on through all available agents and agencies. It means that we as a profession are directly responsible for making the public understand the problems and needs of education.

The Problem of Public Relations

The specific program of public relations for each community must be determined by the existing conditions. No two programs will be exactly alike. It is the function of the superintendent to conduct a searching sociological survey of community conditions and, upon the basis of this information, to recommend a definite policy to the board of education. It is the legal function of the board of education to adopt a policy and to authorize the development of means to carry it into practice. The superintendent is responsible for developing, with the cooperation of teachers and principals, the specific means of procedure whereby the desired objectives may be achieved. Social, visual, oral and written means exist in every community for making essential individual and group contacts.

In any program of child and community education, the teacher is the most important agent. Her position is enviable. She makes continuous contacts with the children and, through them, with the parents. The major emotional interest of every normal parent lies in the child. The success of the teaching process and of public education generally lies in the sympathy, understand-

ing and appreciation developed between the teacher and the parent. No parent who fully appreciates the needs of the child and the part played by the public school in meeting these needs, will permit selfish interests to dominate the schools.

In most of our present day school systems, the problem of informational service for community education has not been recognized and, therefore, a policy has not been adopted. Intelligently developed means of procedure are few. These await the initiative of our educational leaders. In the meantime, the general problem still exists. Under these conditions what can the teacher do to facilitate the process of community education? First of all, it is her duty to know thoroughly her own school system, its policies and practices, its quality and extent.

Four Groups of Contacts

In general, there are four groups of contacts and four groups of professional responsibilities that should become an integral part of every teacher's life. The first group of contacts is with the children. Since the children we teach to-day become the supporters of public education tomorrow, it is essential that the teacher develop in the children she teaches an understanding of the worth and value of public education both to them and to the community. Children can also be so motivated that they will aggressively enlist the active interest of parents in the schools. All of this may be done through indirect as well as direct teaching. Nearly every school situation has an aspect that may be used.

The second group of contacts is with parents. In this field little has been done. Most of our contacts with parents are negative. The average parent usually hears only from the school, and then in a very mechanical way, when something is wrong. Failure in studies and disciplinary measures represent these contacts. This is wrong. No business could afford to develop a series of negative contacts with its customers and exist. How public education has been able to do it so long is hard to understand.

The Teacher's Responsibility to Parents

The teacher's first responsibility to parents is to make only constructive contacts. Under these conditions the emotional set is favorable to the development of sympathy, interest and understanding. In this respect the teacher must always be able to point out the excellent and finer characteristics of each child. The parent must feel that her child is constantly the center of the teacher's interest. Once that feeling of apprecia-

tion and of sympathy is established, other factors may be discussed. The teacher must also realize that each mother thinks of schools in terms of her own past experiences. Her opportunities for learning of new needs and new methods have been so slight that the gap between her conception of public education and its present status is very wide. It is the teacher's task to bridge this gap, making the approach through her interest in the welfare of the child. Upon this sympathy and understanding may be built an aggressive and intelligent interest in public education. The obvious means of accomplishing this is through home visitation by the teacher, school visitation by the parent and motivation of the parent by the child.

The third group—the social—makes constructive contacts possible to every teacher. The teacher should make many friends outside of the profession. Friendship begets confidence, and confidence is the basis for successful education. Whenever questions related to public education arise, the teacher will be able to present authoritative facts and to develop active interest. Membership in social clubs is another means of extending the teacher's circle of friends and of influence.

The Need to Participate in Community Life

The fourth series of teacher contacts is through participation in community life. Religious, civic, charitable and parent-teacher organizations offer splendid opportunities. Judging from the comments of religious leaders, Sunday schools are in a serious condition. Materials and methods are inadequate. Teacher participation and the introduction of professional methods into this phase of religious activity will give to the community an entirely different attitude towards the use of similar methods in the schools. This is one way of demonstrating the effectiveness of modern teaching. Participation of teachers and children in civic activity of various types is another constructive contact that will assist in the development of confidence. Finally, the most important single agency for educating the adult community to the worth, value, condition and needs of public education is the parent-teacher association. Conceived and built around the child, it furnishes a perfect grouping of emotional values that, constructively used, can be the greatest force in creating understanding, appreciation and aggressive support. Under intelligent professional leadership, there appears to be no limit to its social effectiveness.

These, in brief, are some of the professional means and obligations of the teacher as an ag-

gressive agent not only in the instruction of the young but also in the education of the adult. If the teacher fails in her obligations in the field of public relations, no amount of effort by other agents in the system can overcome the deadly effect of continuing negative contacts. This neglect and indifference to the problem of keeping the people informed about their schools will affect seriously both child and community and, ultimately, the nation.

The following summary presents briefly the points that have been discussed in this paper:

Public education depends upon the will of the people.

This will is expressed through legal enactments known collectively as the school code.

Public education is a social institution that must serve the needs of a dynamic social organization. It must be flexible in character to meet and adjust itself to changing needs.

Carrying Out the Public Relations Program

Social change occurs through recognition and acceptance of need by the people.

Acceptance of need depends upon understanding and appreciation.

Our complicated social organization and economic order make it necessary to provide definite means for the continuous education of the general public to a realization of these needs.

The responsibility for the condition of public education rests directly upon the teaching profession.

The teaching profession by virtue of training and position is directly obligated to furnish creative leadership to the people.

The problem may be solved by the development of a policy and a means of procedure for a continuous program of adult education that is concerned with the worth and value, the conditions and the needs of public education.

Every agent within a school system, both professional and nonprofessional, is definitely responsible for his share in this informational service program.

Every teacher can at all times develop in the parents an appreciation of and interest in the worth, value, condition and needs of public education through continuous constructive contacts with child, parent and community.

Since public education rests upon the will of the people, and since understanding and sympathy can be developed only through continuous education of which confidence is the basis, the effectiveness of public education will depend upon the degree of skill with which the public relations program is conceived and carried out.

A Demonstration School Benefits County Teachers

A recent bulletin from the Illinois State Department of Education, compiled in the interest of the one-teacher schools, advises county superintendents to establish at least one demonstration school for the purpose of promoting professional growth among their teachers in service.

According to the bulletin a few such schools have been established and are in operation. It is recommended that each be under the direction of a selected superior teacher employed in the county, that the school in which the demonstrations are held be one "well adapted (to school purposes) and equipped." Other teachers should be invited from surrounding communities for an all-day session. The state department recommends that approximately three-fourths of the school day be spent in regular school work on the part of the children and the demonstrating teacher while the visiting teachers observe. The children are then dismissed and the remainder of the afternoon devoted to conference and discussion. The meeting may be held on a regular school day, visiting teachers being allowed the time by their respective boards of directors, or on Saturday. In the latter case the following Monday should be a holiday for the demonstration school.

An interesting recommendation of the state department is that the school selected for the demonstration session be equipped with a library including "books suited to the ability of every grade and such as the pupils will choose to take home and read at their leisure," supplementary informational books other than the adopted texts, a children's encyclopedia, work books and a reasonable variety and quantity of teaching materials.

Concerning the Rank and Rights of the Librarian

That the librarian should have a rank on any school faculty equal to that of the teachers is the opinion of Pearl G. Carson, George Peabody College of Teachers, Nashville, Tenn., presented in the *Journal of Education*.

"Librarians should receive the same salary as the teachers if they offer the same qualifications of education and experience," Miss Carson says. "They should have the same right and obligation to attend faculty meetings and to take part in them and they should have the same vacations or, if not, they should receive additional salary for additional weeks of work done. They should also have the same social privileges."

Do Teacher Certification Laws Meet the Demands of Education?

The influx of inadequately trained teachers is of concern to fully qualified teachers who should themselves take the lead in raising standards of entrance to the profession

BY O. H. PLENZKE, ASSISTANT STATE SUPERINTENDENT OF PUBLIC INSTRUCTION, MADISON, WIS.

THE work of the schools depends first of all upon well prepared teachers. Of all the elements that contribute to the success or failure of the learning process, the teacher commands first consideration. Fine buildings, modern equipment, broad courses of study, extensive research, supervision, auxiliary school agencies, objectives, and parental cooperation are accessory to the scheme. In the final analysis, the burden of meeting and fulfilling the real responsibility of the school rests upon the teacher in daily classroom contact with boys and girls. The quality of the pupil teacher relationship is the test by which our educational organization may be appraised.

One means of raising the standards of the public service that teachers represent is through licensing and certificating regulations. In some states, laws covering this matter are conducive to disorganization. They lag far behind the accepted practice of better school systems and offer no inducement for teacher improvement. They have remained essentially unchanged for many years. No wonder then that certification functions only in a slight degree as far as teachers' qualifications are concerned. A license is more often regarded as a passport to a job, an obstacle to a job, a red tape credential, than a dignified legal instrument designating the holder as having completed a comprehensive program of training for a specialized profession.

Where Laws Are Weak

Certification laws have several glaring and fundamental weaknesses. They provide for state and local examinations for teachers before they may obtain certificates. The examination system of recruiting teachers has serious limitations. It cannot function as a sifting process for selecting candidates with acceptable character and personality traits. It eliminates and accepts candidates upon the basis of academic accomplishments only. To pass or not to pass, is the

question. Desirable characteristics other than those of a scholastic nature are not measured by the examinations. It does not recognize practice teaching, which is the professional core of good teacher training.

Examinations Are Inadequate Test of Teachers

If used at all, the examination system, on account of its narrow application, should not be the sole means of selecting teachers. It is a survival of an earlier day when academic attainment was a requisite for the means of imparting knowledge for its own sake. Teacher certification should be based upon completion of a course in a teacher training institution or education department of a college. Institutional training provides the selective feature and makes possible observation, participation and practice teaching, all of which are excluded under the examination method.

The principal weakness in certification laws is the general license. In many cases, graduates of two, three and four-year courses, except special courses, receive a general license to teach in any public school, according to law. The same credential is issued to graduates of the universities and endowed colleges. As far as legal teaching privileges go, two years of training entitles a candidate to the same license as that given the holder of a degree. A graduate of a course preparing her to teach in intermediate grades receives a license legalizing her employment as teacher in a high school.

While the world about us has adopted specialization in almost every line of human activity, teaching is for the most part conducted on the level of the general practitioner. The inconsistency and ineffectiveness of such crisscrossing of service cannot be defended. Our educational idea has by common consent been expressed in these words "Equal educational opportunity for all." All children, regardless of mental or physical condition, are to be served by the schools. Individual differences are then the most important

consideration, and therefrom the schools must proceed. The great differentiation presented by "equal educational opportunity for all" must be met by teachers prepared for it. A general license carrying privileges as previously described will not meet the demands of modern education. Licenses should as far as practicable be issued for specific training.

Training Rural Teachers

Rural teaching ranks first in being stepping-stone service. While several factors contribute to that condition, the training required is so brief that no one would consider it adequate preparation for teaching for a long period. Its brevity impairs its reputation at the outset. The statutes of some states set the minimum requirement for teaching to be one year of professional work following high school graduation; others require high school graduation only. That is the general qualification of our rural teachers. A two-year training course should be the minimum. This would provide teachers having more than a year of intensive coaching in methods to be used in rural schools. Equal educational opportunity for all cannot be brought to full fruition if the rural child is discriminated against by the acceptance of one year of training for teachers who direct his school.

City superintendents of some states are empowered to conduct examinations and grant certificates. This may serve as an expediency measure to get teachers under cover. It should be said, however, that practically all city superintendents insist upon state licenses, reserving the exercise of local certification for emergencies. The local license issued when a teacher defaults in obtaining a state certificate has been a detriment to the holder. Many teachers who felt themselves secure in positions with local certificates have found it necessary to secure employment elsewhere. Embarrassments and disappointments followed because the local certificate is not honored outside of the superintendent's district where it is issued. The new and more attractive position is invariably closed except to those holding licenses. Local certification has caused a great deal of unhappiness because it denies the opportunity of service elsewhere. Under it, the sphere of the teacher is limited to one locality. All should hold state credentials because they indicate the completion of a course in teaching; they meet the legal requirements and they are accepted in every school district or city.

Education is a state function and we cannot, as a profession conscious of its trust, afford to operate under an antiquated method which can-

not accurately be called a system. A procedure that does not fit in with modern needs should be revised. Why prolong research and refinements in curriculums and methods if the gates to service are opened wide for all to assume the rôle of teacher by easy means for any and all positions? Why continue a policy that encourages mediocrity?

Professions are built up from within. They have not attained honor and recognition by virtue of the demands of the public they serve. They acquired popular esteem by raising their standards of preparation, by making more stringent the entrance requirements of their professional institutions and by increasing the length of institutional training, to say nothing of required probationary periods following graduation. If teachers desire to share in the general recognition accorded the professions, they themselves must lead the way. Tenure, contracts and salary schedules will help. But in spite of these the unsuited and the unprepared will continue to enter the profession unless standards for admission take an upward trend. Teachers with four or five years of training cannot view with complacency the yearly influx of those taking parallel positions and yet having only two or three-year courses to their credit. Under the present law, this situation prevails. Raising the certification requirements is a matter that should engage the active interest of teachers.

Three Ways of Paying for School Buildings

Three ways of paying for school buildings, according to Joseph M. Gwinn, superintendent of schools, San Francisco, are: (1) through bonds authorized by vote of the people; (2) through a pay-as-you-go plan which means raising the tax rate high enough some year to provide the funds to build; (3) through the depreciation plan which involves an additional tax each year for several years in advance of the year in which the school is to be built.

According to Superintendent Gwinn, the depreciation plan is by far the cheapest way to provide school buildings; the most extravagant method is by bonding.

Between the pay-as-you-go and bonding plans, the first is better adapted to school districts of such size that each year there is need for a new school building. Districts should issue bonds only when it is impossible to provide the necessary buildings through the depreciation or the pay-as-you-go methods.

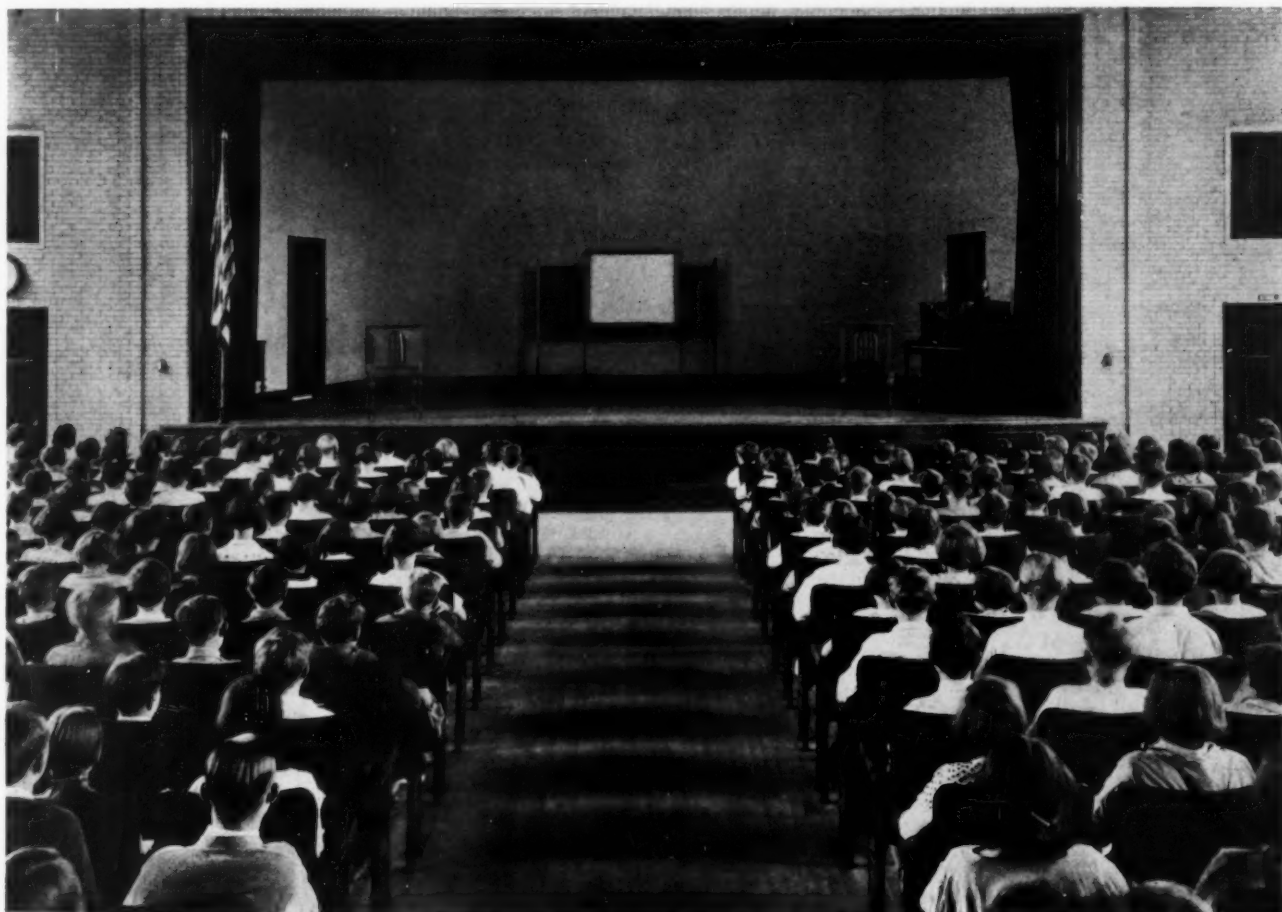
The Radio as a Medium of Practical Instruction in the Schools

An experiment in teaching arithmetic by radio in the Cleveland public schools shows unusual improvement made by the pupils and argues that other studies may be equally well taught

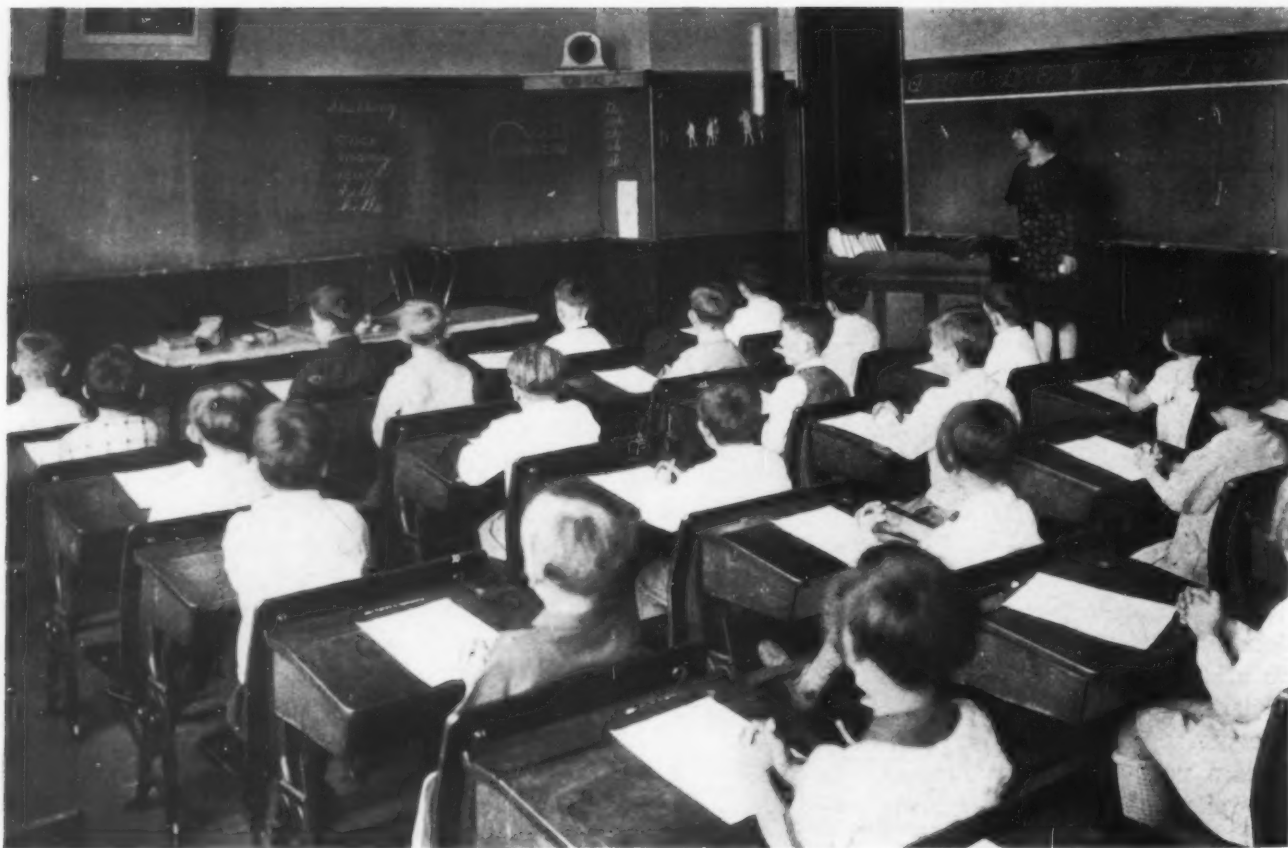
BY R. G. JONES, SUPERINTENDENT OF SCHOOLS, CLEVELAND

AT THE outset, let me disclaim any pretensions to expertness in radio practice in any of its phases. I have reached the belief, through observation and educational experience, that radio can be satisfactorily used to distribute educational practice and educational material to pupils in schoolrooms. It remains to be demonstrated that this belief is well founded. The veriest novice can see that by means of the radio a vast field of material can be distributed to pupils in school as readily as material for information or amusement is sent to all corners of the earth. Radio's value in education is obvious.

General distribution of information to pupils does not, however, necessarily imply an effective educative process. It seems that class instruction in arithmetic would be a critical test of the radio for class instruction, and to this end six classes of third grade arithmetic taught by radio are at present being conducted at the Cleveland public schools. The experiment has been in process for one-half year. The lessons were prepared with great care by one who deserves to be regarded as a specialist. This same person has broadcast the lessons. The children are, without exception, of foreign parentage and come from modest homes.



Centralized radio instruction at Tremont School, Cleveland.



With the classroom teacher acting merely as an observer and checker of their work, the pupils "listen in" on a radio arithmetic lesson.

The regular classroom teachers are present in each of the rooms and serve as observers and "checkers" of the work. Class work sheets are given each pupil and, of course, the direction comes to the pupils from the loud speakers. The teacher does not participate in the teaching, does not utter a word or help a pupil during the broadcasting.

The fact cannot be overstressed that the lessons are scientifically graduated in difficulty, and the organization of some thirty lessons requires nearly the entire time of the specialist during the semester. The teacher practiced speaking over the wire to develop distinct utterance and a satisfactory rate of speaking. After a lesson was given and the results had been checked, the lessons were altered and the pupils reclassified according to their working rates. New work sheets were written to restudy problems that proved difficult of solution. This detail is submitted as evidence of the close attention that has been given to technique. One outstanding item is observed. Many careless statements and restatements are eliminated. For one reason, the teacher is not distracted by contact with pupils. Her sole function is clear presentation. On the other hand, I have never witnessed better concentration on the part of pupils. Needless to observe, these are prime factors in instruction. Let us

proceed to the crux inquiry: Do the pupils not miss the personality of the teacher, the inspiration, the give and take?

The first consideration in the answer is this: The teacher broadcasting has a distinctive personality. Just as Mr. Damrosch has a distinctive personality which one feels over the radio, so this teacher's personality is felt. The teacher is like Mr. Damrosch in that both think clearly and express themselves clearly in their respective fields of endeavor. Both are artists and both express themselves with a convincing clearness and sureness of stroke and with an assurance born of consciousness of understanding and power.

What has been done is simple. A high quality of teaching has been brought to a wide range of pupils. This is a key point in this discussion. In public education an individual has been selected as a supervisor to train, let us say, several hundred teachers to give a lesson in arithmetic which she, herself, may give very well, although she may not be able to communicate her powers to several hundred so that they can do this thing as well as she does it. Therefore, the supervisor with the radio at her command becomes the specialist and sends herself and her message direct to thousands of pupils at one moment. Uniformity of results from instruction by one master teacher seems quite possible. This all means that

the benefits of a good mind are directly multiplied by the number of pupils reached by the loud speaker.

But what becomes of the teacher? The regular classroom teacher remains an important factor even in radio instruction. She has the children for three periods and the specialist for two. We have been more than pleased with the plan as an instrument for teacher training. It is obvious that the instruction is direct and the check on accomplishment immediate. It may be that the bright prospects among teachers will float to the top under this system as never before. Perhaps the specialist will become a supervisor or a training teacher.

Is the Instruction Absorbed?

It is possible, under such a plan, with properly designed machines, to tabulate the work of thousands of children in twenty-four hours and strike a daily balance for a whole city on the accomplishment of fourth grade arithmetic. Do children respond to a teacher far away—a voice only, with no visualization of the personality? Yes. The children will frequently respond in chorus with answers. They respond as spontaneously as one laughs at a joke by a famous comedian.

Is this instruction absorbed? There is no evidence to the contrary so far.

Results of the radio instruction have been carefully and systematically measured. One test was given before the radio instruction started and another at the conclusion of the instruction. The tests were equal in difficulty and the results comparable. The educational research bureau of the Cleveland schools makes the following summary of its findings:

"The radio classes made unusual improvement in addition, the fundamental process taught by the radio lessons. The score on a test in mixed fundamentals—addition, subtraction, multiplication and division—shows the 3B grade performance well up to the standard set by the authors of the test. However, most of the achievement was made through improvement in skill in addition. A conservative estimate would place the accomplishment in addition for the 3B grades at the standard set by the authors for the 6B classes.

". . . The radio classes made more improvement than did classes of the same grade in the same district of the city, and in the city generally, which had not had radio instruction. However, there was more room for improvement. . . . A careful inspection of the results will disclose consistent improvement in the reasoning ability of these pupils.

"Comparing the achievement made in arithmetic by these classes with the indicated 'probable learning rates' (or intelligence quotients) for the school and in the same supervisory district, the children in the radio classes probably have been achieving well up to their ability level.

"In general, the skills in addition designed to be taught by the radio lessons were actually well taught. This argues that, under like conditions, similar skills in other processes may be equally well taught."

I have elected to discuss in detail one single subject out of our experience in the Cleveland schools rather than speculate upon several subjects, because I am impressed that what can be done with arithmetic will test the teaching possibilities by radio effectively. We have done much more in music than we have attempted in this laboratory experiment in arithmetic. I am sure music instruction is quite beyond the experimental stage, that is, as applied to appreciation.

In conclusion, let me suggest that education suffers much in the introduction of new practices. Many unskilled persons rush into new projects unprepared and much condemnation results. Frequently a measure, wholly sound and fruitful, is abandoned because of bungling hands. A symphony would be impossible for amateurs to produce. Let us hope that so promising a venture as radio, a multiplier of the best minds, may so command our respect and best power that we shall not approach its use unthinkingly and unprepared to get the best results from it. This would only delay its inevitable adoption. Such is my prediction, based upon an incomplete trial of the radio in educational work.

A Million Pupils Are Preparing to Enter Business

The number of persons preparing for business in the United States is increasing rapidly, the specialist in commercial education, the United States Office of Education, J. O. Malott, points out in a recently published survey.

Approximately 1,000,000 pupils in public and private high schools, private business colleges and universities are definitely preparing to enter business occupations, the survey discloses. Of these, two-thirds are women, and it is pointed out that the number of women taking business subjects is increasing more rapidly than the number of men.

Although 132 colleges offered curricula in business during the past two years, approximately 400, or more than one-half of the colleges and universities, offered some business courses.

What Size of Film Is Most Effective in Classroom Teaching?

The 16 m/m projector and film are used with great success in the teaching of biology to pupils on New York City's east side, the film instruction dovetailing admirably with the oral

BY MARY E. BING, TEACHER OF BIOLOGY, CORLEARS JUNIOR HIGH SCHOOL, NEW YORK CITY

THE recent developments of science and invention have assumed proportions truly characteristic of the twentieth century. However important some of the recent startling discoveries may be, it is their practical application in the every-day life of the individual and of the commonwealth that is immediately felt. As a result of this application there has developed out of what practically was a toy, a phenomenal motion picture industry.

The application of the motion picture to amusement and entertainment has changed the trend of thought of older generations. It has added—after the usual extravagance incident to new movements—a new sense of beauty and of understanding. In a large measure, the motion picture has become not merely a means of “passing the time” but a medium of instruction. In fact, the living

picture on the screen is shaping the minds of nations and because of this it is also bringing mutual understanding to races that formerly were strangers to each other.

And the motion picture has come into the homes. This has been made possible by the economical and home sized substandard or 16 m/m film. The experience and knowledge gained by the manufacturers in the construction of theater machinery have been applied and utilized in the 16 m/m field. They have also made such modifications as are necessary for the smaller film. The more the 16 m/m film, camera and projector are developed, with due regard to the nonprofessional user, the greater will be their usability and value. Just as locomotives had to be modified when privately operated automobiles began to compete with the huge carriers of bulk on the



Biology, once a dreaded subject, holds a fascination for the pupils when it is taught by means of moving pictures.

steel rails, so the 16 m/m motion picture industry is now shaping its own course.

It was natural that the amusing or instructive film of the home should be tried in the educational field. In this way, a new and valuable instrument for shaping the youthful mind has been placed in the hands of educators. It is an old principle in education that the visual picture is more impressive, effective and lasting than the mental picture. The eye conveys impressions more quickly than the ear.

Value of Visual Instruction

If it is further considered that in the schools new and rather complicated ideas have to be conveyed to minds that lack the power of concentration of grown-ups and that entirely lack trained observation, then visual instruction by means of the motion picture becomes instantly understandable. If the objects about which teachers speak to their classes are familiar to the pupils, then it is possible to explain the uses to which these things are being put, their relation to each other and their effect upon each other. But, if the matter itself is quite unknown to the pupil, the difficulties are great.

In my biology classes on the east side of New York City composed of generally bright and naturally intelligent pupils, there are only a few of the children who have seen the animals, the tools and the environments so familiar to the children on farms. Of course the teacher in the country districts meets the same difficulty when she refers to things that are characteristic of the city. In natural history, which is mainly descriptive, models or taxidermic exemplars will help a lot, yet they will never show the important variations of locomotion, of life and of environment. The motion picture will do so entertainingly, effectively and accurately.

My main subject at present, in the range of a junior high school program, is biology. I love the subject because through it I can inform the girls in my classes regarding many of the hygienic necessities that promote a more wholesome life. Through biology I can discuss with my pupils the food they eat and its preparation, the water they drink and the ventilation of the rooms in which they sleep.

Making Biology Interesting

Here is a subject that is unfamiliar to the parents and bewildering and wholly unknown to the children. For years, it has been my task to teach biology to a large group of pupils who have advanced beyond the grammar school, yet who may not continue their studies

through the high school. It is important to give an all-around and thorough preparation to those pupils in the junior high school who after a few years will enter into practical life and who probably will be, henceforth, deprived of the benefit of further tuition. As far as science is concerned, at least, they should be able to understand intelligently the daily press and the average magazines that may constitute their reading matter; they should be given a sane outlook on life to take the place of superstitions and misguided conceptions; they should have an understanding of the doctrines and the facts that we consider basic in human relationships.

Visual instruction by means of the motion picture has meant a great deal to my pupils in the Corlears Junior High School biology classes. After a two years' experiment, I can safely say that teaching results have been better, and biology, which was once a dreaded subject, now holds a great fascination for the class. It may be that there is always an element of entertainment in the picture itself, a wonderment about the "movie," the sparkling objects on the screen, but I believe that the element of self-satisfaction on the part of the pupils is greater because they congratulate themselves that they understand what the teacher is speaking about when they see it.

Films Help Pupils to Progress

In biology we must frequently consider infinitely small organisms that are just beyond the discernment of the naked human eye. Microscopes of medium strength can be and are provided. A drop of water, which is a cosmos in itself, can be shown to each child who can see the captivating life therein, the harmless and the dangerous organisms utterly different from anything he has ever seen. But if thirty girls go singly to the microscope, what remains then of the hour to teach the lesson, which should be an application of what they see in the microscope, explaining the contamination of the water by dangerous bacteria and how to prevent it?

On the other hand, if a picture is shown on the screen, and an expertly conceived, designed and executed film is brought to the simultaneous view of all in the class, is it not obvious that there will be greater progress on the part of the pupils? The board of education of New York City heartily approves this new method of teaching by motion picture. Many of my colleagues are enthusiastically reporting advances made by their classes through the use of motion pictures.

I have stated that the advent of the 16 m/m film was essential to bring the motion picture into the

schools. The apparatus, in this case mainly the projection, is small, light and easy to handle. The 16 m/m film is a safety film, and the great precautions prescribed by law and by the school authorities for the use of the standard film were naturally suspended or cancelled for the 16 m/m safety film.

Small Projector Is Adequate

There is, of course, the question of economy. The 16 m/m projector is simpler in operation and allows the presentation on a 400-foot reel of the same number of pictures as could be shown on 1,000 feet of standard (35 m/m) film. The running time of such a 400-foot reel is about sixteen minutes, just the proper part of a lesson. Another point is the means of illumination. The regular lighting current will suffice to give ample light to throw the picture for the length of the classroom, and naturally also to drive automatically the projector's machinery.

Arguments against the use of motion pictures in education may be advanced from some quarters because there is nothing new that does not meet with opposition and that does not have to overcome the inertia of those who cling to old and conservative methods.

As to the choice of equipment, I cannot speak with authority because to do so would not only require an actual testing out of the diverse 16 m/m projectors but it would also require a mechanical expertness which I am far from claiming. Our school has acquired a standard make of projector. We like it, find it simple to operate, noiseless to a degree that it in no way distracts the attention of the pupils, or interferes with the teacher's oral explanations. The picture has fine illumination and during the time—more than fourteen months—that this projector has been in use in our school, it has not failed us once.

Educational film to be used in classes must virtually be devised for that purpose. It should not be a film that attempts to appeal equally to grown-ups and to children. There should be enough of the entertaining, of the startling, of the sensational in the educational film to keep alive curiosity and animation instead of smothering them under an avalanche of scientific and matter-of-fact data. The substance of the film should be carefully devised so that it will be within the educational program of the class and of the particular lecture. The educational film should not broaden out into subjects that are beyond the curriculum or that are too diversified. If, for instance, the subject of fermentation is being portrayed, then the film need not go into the deepest roots of chemistry or bacteriologic life. It should certainly explain

all that can be explained about fermentation but it should keep within the intelligence scope of the pupils. A close adherence to thoughtfully laid out and prescribed school courses is essential.

The film alone cannot possibly take the place of oral instruction. Both must go together and it is the layout of the film itself that must provide the necessary places for emphasis in the lesson being taught.

The development in the field of sound film will naturally add new power to visual school instruction. The titles now shown on the film are helpful, yet, properly spoken and enunciated oral explanations over the sound tracks will be excellent, when the sound film for the home and the apparatus conveying it have been satisfactorily developed. The film in natural colors is another immediate development and ultimately the perspective picture will round out the cycle. At present, however, we have a most effective medium of visual instruction—the motion picture projector in the schoolroom.

How Yale University Assists Its Working Students

Students at Yale University earned \$687,647 last year toward their college expenses, the annual report issued by Albert B. Crawford, director, the university bureau of appointments, shows. More than a third of the students at Yale are working their way through school, according to the report. The amount the students earned and the sums paid out in scholarships and loans, \$485,620, bring the total spent in financial aid to students to \$1,173,267.

Of the \$687,647 earned by the students, \$418,929.97 was earned while the university was in session, the balance being earned during the summer vacation. A total of 1,246 persons secured employment through the bureau of appointments, and 456 were given work during the summer vacation.

The report further points out that the wives of graduate or professional students are having success through the bureau in securing employment, and in this way the bureau is helping to solve the often pressing problems confronting married students. During the last year, fifty-seven women thus earned nearly \$50,000.

Some of the occupations the students follow include: accountant, advertising agent, announcer, artist's model, blood transfusion donor, carpenter, chauffeur, entertainer, housekeeper, pallbearer, gardener, guide, stereopticon operator, teacher, tutor, translator and supernumerary.

A Parish School That Is Designed for Educational Needs

Because a complete educational layout was the foundation for the architectural plan of St. Paul's Parish School, Grosse Pointe, Mich., the work of construction was greatly simplified

BY ARTHUR B. MOEHLMAN, PROFESSOR OF ADMINISTRATION AND SUPERVISION, UNIVERSITY OF MICHIGAN

UPON the beautiful shores of Lake St. Clair¹ in a region where romance and tradition still linger, stands an old, unique and wealthy parish—St. Paul's in Grosse Pointe, Mich.

When the problem of planning a new school for the parish arose in 1925, Father Nacy and his board of lay advisers, several of whom were also members of the Grosse Pointe Public Board of Education, decided on "a parish school, second to none in the state or in the nation." In view of this decision, the educational designing of the new parish school—St. Paul's—presented an unusual but interesting problem. The factors considered were: extent of training; size of building; organization of the curriculum; size of

class; method of administration; unit and sectional construction and provision for adult parish social needs.

The first policy considered was the extent of training the parish would give. The Grosse Pointe public schools had recently adopted a K-6-3-3 organization and were building a senior high school¹ convenient to the entire parish. Since St. Paul's is a relatively small parish the number of children in the upper grades is not large. After carefully considering all of the factors involved, the parish decided upon a seven-year elementary school and a three-year junior high school as the arrangement best suited to its needs.

A survey was next made to find out the number

¹Discovered by La Salle in August, 1679, and named by Father Hennepin.

¹A description of the Grosse Pointe Senior High School was published in the May, 1928, issue of *THE NATION'S SCHOOLS*.



This architect's drawing shows the elevation of the school. Only the north half has been completed.

TABLE II—JUNIOR HIGH PROGRAM
(Number of clock hour recitations weekly)

Subject	Seventh	Eighth	Ninth	
			Commercial	General College Prep.
Health				
Gymnasium	4	4	4	4
Hygiene	1	1	1	1
Languages				
English	5	5	5	5
Latin .....	.	.	.	5
Exact Science				
Mathematics	3	3	3	3
General Science	2	2	2	2
Social Studies				
History	5	5	.	.
Civics .....	.	.	5	5
Vocational				
General Shop	3	3	.	3
Mechanical Drawing	1	1	.	1
Vocational Information	1	1	.	1
Bookkeeping .....	.	.	5	.
Cooking	2	2	.	2
Sewing	2	2	.	2
Homemaking	1	1	.	1
Fine Arts				
Auditorium*	2	2	2	2
Music	2	2	2	2
Art and Design	1	1	1	1

*Religious instruction given here.

of children the parish would be required to educate. This was done by means of a study of the families and the number of children of different ages. The proportion of children of elementary age in the existing parish school and in the adjacent public schools was determined. The survey indicated that the school must provide for approximately 700 children in the kindergarten and the first nine grades. A proportional distribution by grades gave the following needs: kindergarten, 80; elementary grades, 480; junior high grades, 180, a total of 740 children.

Since the school was in the Grosse Pointe district and since the children would ultimately enter that high school, the parish board felt that the same curriculum breadth and standard were required by St. Paul's. With the exception of certain adjustments necessary to provide for re-

ligious instruction, which is not a part of the public school organization, the elementary curriculum was developed (in terms of thirty-minute daily recitation periods) according to Table I.

An analysis of this curriculum indicates a six clock hour day, divided into twelve thirty-minute periods, six of which are devoted to the tool subjects and six to health and other studies.

The junior high curriculum provided a general program in the seventh and eighth grades and three types of specialization in the ninth. These courses included one in commercial subjects, a general course and a college preparatory course. All three courses were similar with respect to five subject divisions, the difference occurring in the vocational classification. The commercial course provided bookkeeping, the general course a continuation of shop and homemaking and the

TABLE I—THE ELEMENTARY SCHOOL CURRICULUM

Curriculum	Grades					
	First	Second	Third	Fourth	Fifth	Sixth
Health	2	2	2	2	2	2
Language	6	5	5	4	4	4
Exact Science	0	1	1	2	2	2
Social Studies	2	2	2	3	3	3
Religion and Fine Arts	2	2	2	1	1	1
TOTAL PERIODS	12	12	12	12	12	12

college preparatory substituted a foreign language for the vocational group.

Provision was required for a full program in health, language, exact science, social studies and fine arts for each child. Religious instruction was organized as part of the auditorium activity. The curricular requirements, expressed in clock hour recitations per week, are shown in Table II.

With the exception of the kindergarten, the policy of partial departmentalization was adopted for the first six grades and complete departmentalization in the junior high school. In the elementary division the tool subjects were to be taught in the home room and the rest in specialized rooms. In general, it was planned to divide the home room periods into two sessions of one

TABLE III—ROOM REQUIREMENTS FOR THE ELEMENTARY SCHOOL AND THE JUNIOR HIGH SCHOOL

<i>Elementary</i>			
<i>Room</i>	<i>Size</i>	<i>Capacity</i>	<i>Number</i>
Kindergarten	22' x 30'	35	1
Kindergarten Lockers	22' x 15'	..	1
Classrooms	22' x 30'	40	6
Science and Literature	22' x 30'	40	1
Art and Music	22' x 30'	40	1
Auditorium	40' x 60'	80*	1†
Gymnasium	40' x 60'	80*	1†
Office	22' x 30'	..	1†
Examination Room .....	.....	..	1†
Library	22' x 30'	40	1†
Kitchen	22' x 15'	..	1†
Toilets	As per code	..	1†
Lunch Room‡ .....	.....	..	..
Teachers' Rest Room	22' x 15'	..	1†
<i>Junior High</i>			
<i>Room</i>	<i>Size</i>	<i>Capacity</i>	<i>Number</i>
Auditorium	40' x 60'	80*	1†
Gymnasium	40' x 60'	80*	1†
Languages	22' x 30'	40	1
Mathematics and Science	22' x 30'	40	1
Social studies	22' x 30'	40	1
Shop	22' x 30'	15	1
Cooking and Sewing	22' x 30'	15	1
Bookkeeping	22' x 30'	30	1
Music	22' x 30'	40	1
Art and Design	22' x 30'	30	1
Library	22' x 30'	40	1†
Examination Room .....	.....	..	1†
Kitchen .....	.....	..	1†
Lunch Room‡ .....	.....	..	1
Toilets	As per code	..	..
Teachers' Rest Room	22' x 15'	..	1†

*Daily instructional capacity. Actual capacity of auditorium, 250.

Maximum capacity of gymnasium, 80.

†Joint use by elementary school and junior high.

‡Classrooms to be used as lunch room during noon period.

The class sizes adopted as standard were those prevalent in the Grosse Pointe Public Schools. They included: kindergarten, 35; elementary, 40; junior high, 35. On account of the small total involved, less than 800, it was obvious that these standards could not be uniformly maintained. Certain groups would be larger and other groups smaller. These standards were adopted primarily as representing a mean, in terms of which individual space allotments were to be made.

and a half hours each, the first given in the morning and the second in the afternoon. This division necessitated the children moving from the first to the second floor and *vice versa* only twice daily. Because of the relatively small size of the classes and because little enrollment occurred during the middle of the year, the school was organized upon an annual rather than a semi-annual promotion plan.

Although the formal plan about which the

building was planned provided for the housing of the elementary and junior high schools, it was by no means certain that the parish would continue this program for the next generation. Since the committee had decided upon a certain ultimate sized unit, it was necessary to provide a maximum of flexibility to meet unforeseen future changes. Because it is easily possible to provide flexibility through unit construction, a 22 by 15-foot unit was selected. All natural and artificial lighting and all heating and ventilating were planned so that each 22 by 15-foot area was complete in itself. The large audience units, the auditorium and the gymnasium, were developed as 60 by 40-foot units, and planned with the long dimension parallel to the main axis of the building. They represented eight construction units and were easily fitted into the general plan without waste of space in other portions of the building.

Upon the basis of adopted class size, a 22 by 26-foot classroom would have been large enough to carry the junior high load. But the policy of the junior high was by no means fixed for all future time. It was merely a current plan. Members of the committee felt that it might ultimately be more economical to operate an elementary school with larger numbers than to carry a small elementary group and a small junior high group. Since the policy change, in light of the Grosse Pointe junior high school development, was a future possibility, it was considered best to use a standard construction unit throughout, thus ensuring the largest amount of flexibility for a future shift to a complete six-year elementary program. All classrooms were accordingly planned as two construction units, and toilets and other accessory requirements were planned as single construction units.

Provision Made for Future Expansion

The committee decided upon a building with accommodations for 740 pupils operating as an elementary and junior high school. In the opinion of the committee, this represented the maximum size the parish planned to build. Although this fact seemed fairly well established, it was thought necessary to make ample provision for future expansion in case some unforeseen radical future change in policy made enlargement desirable. Provision was therefore made for future extension upon both of the lateral corridors. Because site limitations make it impossible to expand on either end of the main axis, the end rooms were placed so that the width gave access to the corridor.

As a result of unit design, it is possible to

use this building for the original elementary-junior high organization with a capacity of 740, or it is possible to change to a purely elementary organization which would give the building a working capacity of 870 upon a semidepartmentalized organization. Such a change would not necessitate great internal change, except with respect to the shop and to the sewing and cooking room.

School Is Built in Two Sections

It was the desire of the parish to erect the building in two sections. This factor was given careful consideration in educational designing. The complete elementary school, with the exception of one classroom, was provided in the first section. The current membership at time of construction was 253. The working capacity of the first section was 560. Allowing a period of five years for an enrollment sufficient to fill this capacity, it was possible to arrange a construction schedule whereby the parish could, without assuming too heavy a burden, finance the construction over a five or seven-year period. The junior high school was planned as the second section but was developed only in general units without making specific plans for details of equipment and furniture.

The adult parish needs were conceived by Father Nacy and the lay committee to be a provision for centering the adolescent social activity (boy scouts, campfire girls) in this building, for community entertainments, adult recreational activity and parish social gatherings, including the serving of meals. Since this was planned as an integral program, all of these demands were carefully considered in the educational design. The auditorium, without change, furnished means for community entertainment. The gymnasium, with adequate auxiliaries in the way of shower baths and lockers, provided means for caring for adult recreational activity. Large gatherings, particularly parish dinners and dances, were accommodated by so designing the gymnasium and the auditorium that they might be easily made into a single room, 40 by 120 feet by sliding the sound-proof folding partition between the two rooms. To give this large room a feeling of unity, the wood trim treatment used in the auditorium was also used in the gymnasium. A specialized kitchen was designed close to the gymnasium with sufficient equipment to care for simple dinners for large groups.

A portion of the space over the gymnasium was planned as a meeting room for boy scouts and campfire girls, with entrance either from the gymnasium or from the second floor corridor.

The final problem was to provide space for small group meetings. By specifying movable furniture in the classrooms, it was possible to use these facilities for daytime instruction and evening social gatherings, without extra expense.

Upon the basis of these factors the facilities listed in Table III, were determined upon as necessary. A study of the accompanying floor plans

will show the manner in which these facilities were incorporated into the educational plan.

When the educational plan was completed, it was submitted to the parish leaders who accepted it with slight modifications. Architects were selected and the first unit was authorized. The parish subscribed liberally and the building was ready for use in the Fall of 1927.

How the Structural Plan Can Coincide With the Educational Layout

BY NEAL M. DUNNING, SMITH, HINCHMAN AND GRYLLS, ARCHITECTS AND ENGINEERS, DETROIT

FROM the standpoint of the architect the planning problem of St. Paul's Parish School, Grosse Pointe, Mich., was greatly simplified by the fact that the educational layout was predetermined by an educational specialist. The architect's problem was to design a building to coincide with the educational plans, a building in harmony with historic surroundings, a building in keeping with the dignity of an old residential section.

The property facing Lake St. Clair was dotted with large trees and was of sufficient size to assure interesting locations for the school, the Sisters' home, the playgrounds and the athletic field. The school building requirement was for an elementary school and a junior high school to

be built in two units. The first unit was the elementary school, the exterior design of which was in Tudor Gothic to harmonize with the residential surroundings.

Red brick, stone trim and a graduated slate roof were blended to secure a pleasing effect. Reinforced concrete, brick and hollow tile were used in the construction to make the building fire resistive. The matter of orientation was given thoughtful study. As a result, all rooms used for study and recitation receive direct sunlight during some part of the day.

The mechanical equipment room, the fan room and the boiler room are in the basement. The first floor rooms are just above grade. The plan, of the open type (no courts), ensures maximum



Red brick, stone trim and graduated slate are blended in a pleasing effect in the Sisters' home.

sunlight penetration and makes possible a wide range of individual treatment. In the design and construction of this building the classroom or grade room is a unit. In planning any school building, the architect's chief problem is to get together the required number of these units in the most economical and effective manner and have the accessory rooms, such as toilets, corridors and rest rooms, so grouped as to yield the best results and at the same time keep the total floor area down to the minimum.

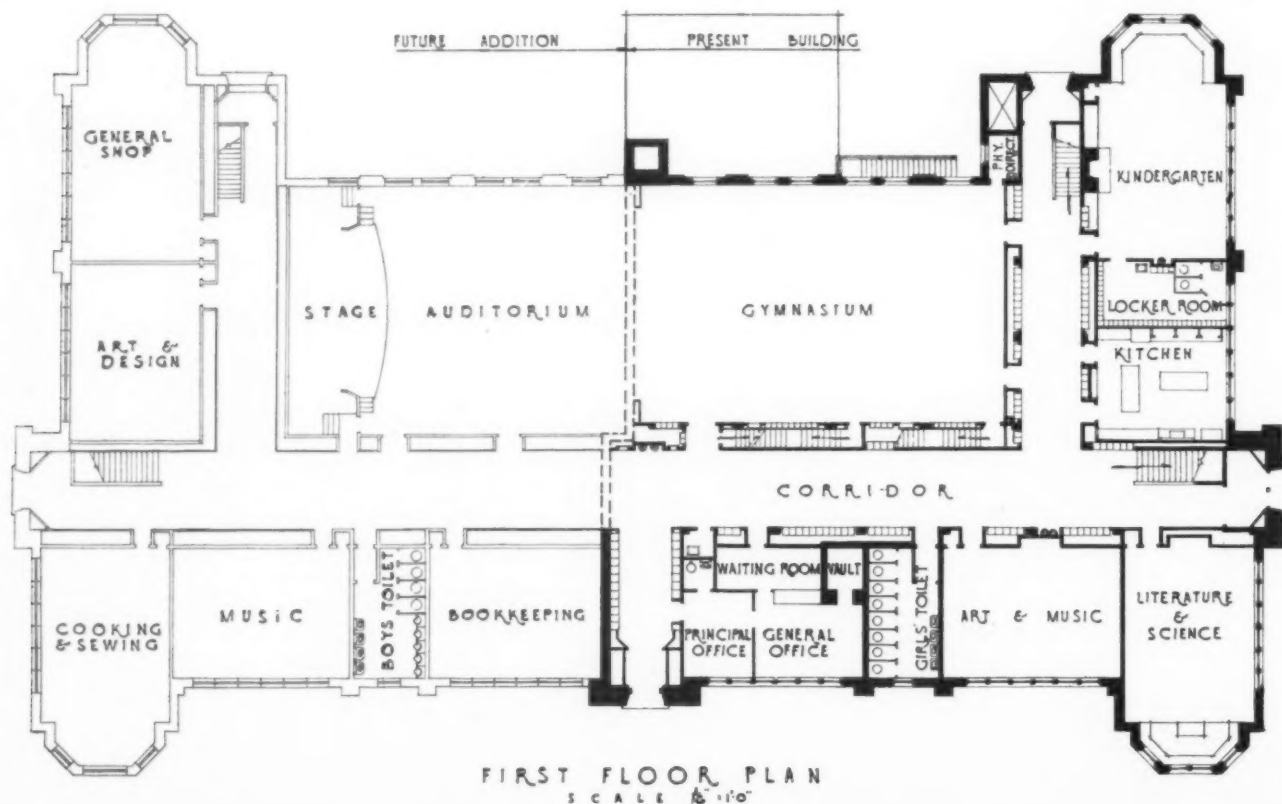
The corridors, exits and stairways of St. Paul's Parish School are so designed that the entire building may be emptied in the least possible time. Lockers are recessed in the corridor walls, one for each pupil and are easily supervised. The corridors are also supplied with recessed drinking fountains. The corridor wainscot is marble and the floor is of colored linoleum laid in alternating squares with a terrazzo base and border. The stairways are of reinforced concrete construction. They have terrazzo (nonslip) treads, risers and strings, and marble wainscot and are within the shortest distance of the greatest number of pupils. The balustrades are of the closed type (marble) and are sufficiently high and strong to prevent accidents.

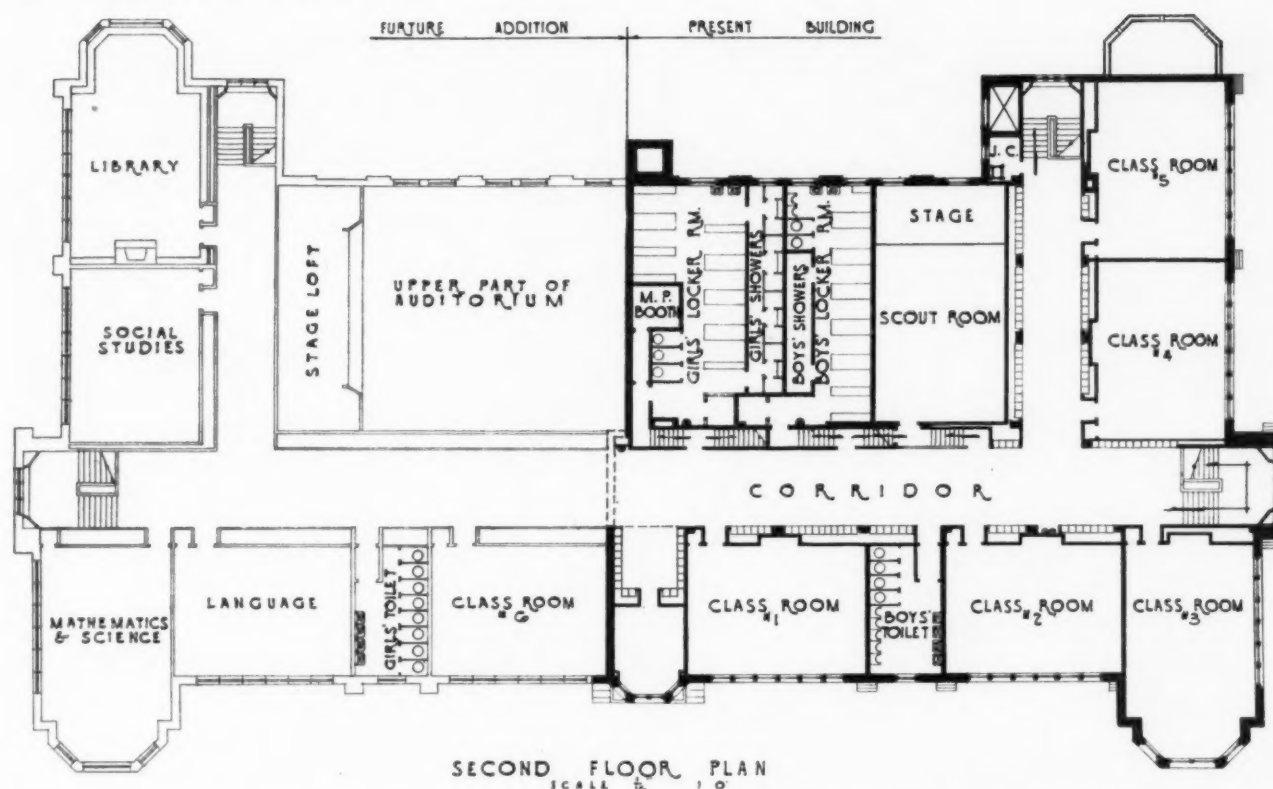
In designing and selecting the interior finish, the general idea was to avoid projections that catch dust and increase the difficulty of securing cleanliness. For this reason, the marble wainscot, terrazzo base, lockers and metal locker trim

in the corridors are all on the same plane or face. The woodwork throughout is of plain and simple pattern and all deep cut moldings have been avoided. Plain, flush, veneered doors, without panels, moldings and transoms were chosen. All unnecessary wood trim has been omitted.

Since the environment of the child is a powerful factor in molding character and producing impressions of lifelong permanency, the architects of this school have endeavored to make the child's school environment teach him to appreciate beauty in nature and in art, to know some of the fundamental principles of beauty and to make a practical use of these principles in the development of his esthetic nature.

Before the choice and purchase of pictures naturally comes the proper preparation of the walls for the pictures. Because the walls are a fundamental element in interior decoration, their preparation as an appropriate background for pictures was given careful attention. The problems involved in such preparation were principally the division of the wall surface with a view to securing pleasing composition and suitable spaces, and the proper use of colors. Simple principles of good proportions and space division are taught in the schools. With this in mind the architects treated the walls in this building so that they could be used as models in teaching the child the fundamental principles of proportion. This has been accomplished by tinting the wall spaces and by properly placing the doors, book-





cases, clock, blackboards, telephones, registers and grilles in these walls.

The bulletin board is an important contributing factor in the decoration of the classrooms. The tendency to clutter schoolroom walls with all sorts of small prints, examples of pupils' work and other objects fastened along the blackboard frame or other parts of the woodwork is general. A bulletin board has been provided in each room of this building which makes possible a continuous display of the pupils' work.

The same study and care shown in the creation of the school building were also shown in the Sisters' home in connection with the school. Here in the same beautiful surrounding has been built a modern, comfortable home for the teachers of the school where they may retire for rest or study. A chapel has been built in the home.

Heating and ventilating were planned in accordance with the most modern and scientific developments. Every thinking person is aware of the vital and far-reaching importance of properly heating and ventilating schoolrooms. Scientific tests have proved that good ventilation means mental stimulation and increase in health and working energy. Good ventilation and the proper distribution of heat mean increase in mental efficiency and decrease in days of sick leave. Architects and engineers who permit poor provision and distribution of clean, pure, fresh air in the school buildings they plan are encouraging irreparable waste in mental training.

The architects of St. Paul's School, believing

that no single feature in the design and construction of the building is more important than its heating and ventilating system, constructed a satisfactory and efficient mechanical plant, using a system improved from the so-called "all blast" system. Under the usual method of the "all blast" system, heated air, introduced into the classroom through duct openings near the ceiling of the corridor wall, flows across the room and during periods of low temperature out of doors it is chilled by contact with the cold outer walls and windows. As a result of the change in density due to this chilling, the air falls toward the floor near the outside wall, with the result that the pupils in the outer row of desks are in an atmosphere frequently five and sometimes ten or more degrees lower than those seated at desks on the inside aisle next to the corridor wall.

To overcome this objection, there was installed a system which, instead of admitting the entire supply of heated air through the duct openings on the inner or corridor wall of the classroom, admits only about 75 per cent of the supply in this manner. The remaining 25 per cent is introduced through ducts from the plenum chambers, thence through narrow slits—from $\frac{1}{8}$ to $\frac{3}{8}$ inches in width—extending the whole length of the window stools. The film of warm air, rising from this slit along the cold side of the room, mixes with the descending chilled air and flows back across the classroom at the temperature level of the mixture. This has entirely corrected the uneven horizontal temperature distribution of the



In the kindergarten room, the ventilating ducts near the ceiling, the excellent lighting and the bulletin boards, providing a place for an orderly display of the pupils' work, demonstrate careful planning.

"all blast" system in use in so many schools.

Aside from this rather unique method of introducing a portion of the heated air through the window stools, this system operates the same as any "all blast" system, in which the air for ventilation serves as the carrier of the heat to compensate for structural losses. Recirculation is used to a greater or less degree, thus conserving heat and lowering operating expense. The entire system is under thermostatic control, including the air intake dampers above the roof. Apparatus for air cleansing, humidification and automatic temperature regulation is a part of the heating and ventilating system.

Outdoor air is drawn into the system through two fresh air shafts which open above the roof but which are also connected with the attic, spaced (by means of thermostatic controlled dampers) where the ducts from all the classrooms terminate. By regulation of the supply and exhaust dampers, recirculation of any desired portion of the air is thus made possible.

After the air has passed through the cleansing and humidifying apparatus, a portion of it is passed over radiation and heated, while another portion is by-passed around the heating coils. The heated air is delivered into one half of a double plenum chamber which is under the first floor corridor and extends through the center of the entire building. The cooler air is delivered into the other half of this plenum chamber. Mixing

dampers under thermostatic control from each room regulate the relative quantities of heated and tempered air from this main supply (the plenum chambers) which enters the branch ducts leading to the room and thus maintains the desired temperature. The branch ducts, of which there are two to each standard size classroom, are again divided to provide for the admission of 75 per cent of the air to the room through the opening near the ceiling of the corridor wall and of 25 per cent through the window slots. This variation of the "all blast" system has successfully overcome the frequent objection against the conventional systems of this type.

In the lighting of this building, the five main points considered were the quality of illumination produced, convenience and maintenance, the appearance of the installation, the efficiency of the system and the cost of installation.

Intercommunicating telephones and bell signal systems have been installed throughout the entire building. A dependable fire alarm system entirely separate and distinct from the bell system used for calling or dismissing classes has been installed.

St. Paul's Parish School was erected with practically no extras. Both the architects and owners were saved considerable expense and delay because the plans and specifications were complete in all details. Extreme care was used in the preparation of the specifications, plans and details of the building and in construction.

Index of School Building and School Supply Prices

*Construction costs increase steadily since June;
a marked decline in prices of basic materials
brings school supply index to a new low level*

BY HAROLD F. CLARK AND OSCAR K. BUROS, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, AND JOHN GUY FOWLKES, UNIVERSITY OF WISCONSIN

THE cost of constructing school buildings has increased steadily since last June, as shown by the index of school building prices. When both labor and material costs are considered, the final index for October stands at 98.28, which is 0.21 points higher than the index number for the previous month, and 0.90 points higher than the corresponding figure for October of last year. The preliminary figure for November indicates no change. In terms of the purchasing power of the dollar, a dollar to-day will purchase 1.7 cents more building construction value than would a dollar in 1926.

The index of school building labor costs again reaches a new high for all time. The final index number for November is 103.86, which is 0.93 points higher than the same figure for November, 1928. It is generally felt that further wage advances in the near future are quite unlikely and

that a certain amount of wage reduction is probable. Material prices for October, as indicated by the index of school building prices, increased slightly over September. The preliminary estimate for November is slightly lower. During the past three months, material prices have shown little variation.

The total valuation of new building contracts awarded in thirty-seven Eastern states, as reported by the F. W. Dodge Corporation, amounted to \$391,012,500 during the month of November. This amount is 13 per cent less than the corresponding valuation for October of this year and 17 per cent less than the total for November, 1928. During the past five years, the period for which there are comparable data, there were only four months having a smaller total valuation of new building contract awards. All of the four months were in January or February, months

COMPARATIVE FIGURES ON THE COST OF CONSTRUCTING SCHOOL BUILDINGS

	Material	Labor	Total Costs
1920	133.42	79.30	110.63
1921	102.27	82.96	94.14
1922	97.51	78.87	89.66
1923	108.28	87.64	99.58
1924	104.13	94.49	100.01
1925	99.84	95.98	98.22
1926	100.00	100.00	100.00
1927	95.01	101.99	97.95
1928			
November	93.32	102.93	97.37
December	95.41	102.93	98.58
1929			
January	95.32	102.99	98.58
February	95.63	102.99	98.73
March	95.26	102.99	98.51
April	94.00	103.02	97.80
May	93.92	103.00	97.74
June	93.00	103.14	97.27
July	93.13	103.36	97.44
August	93.20	103.34	97.47
September	94.16	103.46	98.07
October	94.28	103.78	98.28
November	94.20*	103.86	98.27*

*Not final.

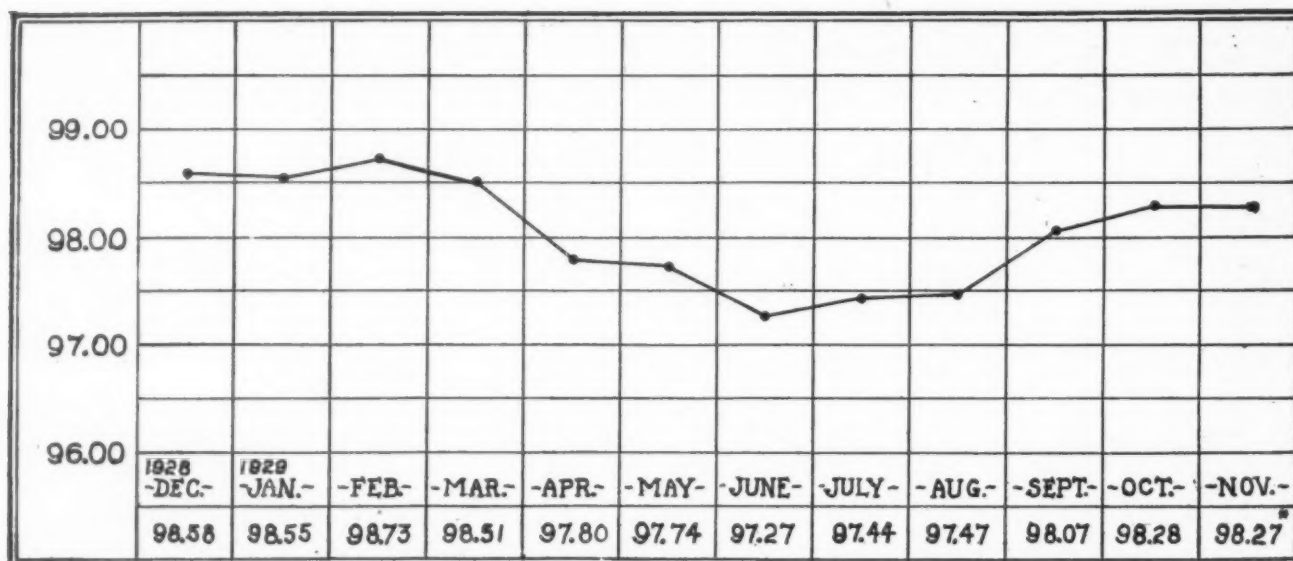


Chart 1. Index of school building prices, showing combined labor and building costs. *Not final.

which due to seasonal influences are usually least active. For the first five business days in December, the average daily valuation of new building contracts awarded is \$21,721,900. This figure represents an increase of about 39 per cent over the corresponding figure for the entire month of November.

The total value of contracts awarded for educational buildings during the month of October

is \$36,892,600. This figure is 24 per cent greater than the corresponding figure for the preceding month and 18 per cent greater than the same figure for October, 1928. The total valuation of educational projects during 1929 for the period ending November 22 is \$358,019,400, which is but 2 per cent less than the amount for the corresponding period last year.

The attention of the nation has been centered

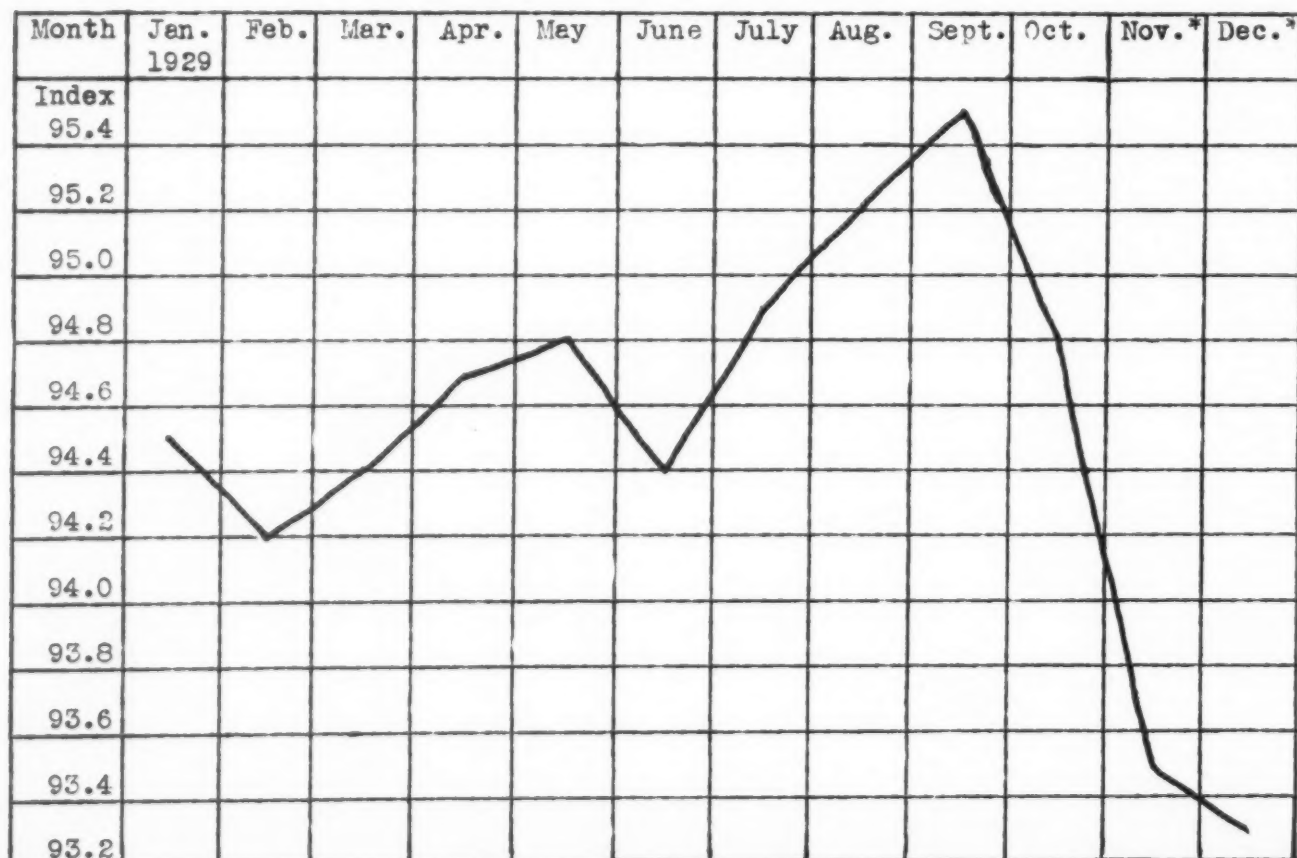


Chart 2. Monthly index of prices of instructional school supplies. *Not final.

upon the courageous efforts of President Hoover to avert any possible industrial depression, following the recent collapse of the stock market. The details—the conference of the leaders in American economic life, the bolstering of confidence, the proposed plans, the creation of a temporary National Business Advisory Council—are so familiar that further comment is unnecessary, except to call attention to the dominant importance given to construction as a business tonic.

One-half of the building mechanics in Chicago are said to be unemployed at the present time. It will be of interest to watch the success of labor's efforts to retain their high wages, in the face of a diminution in building construction and an increasing amount of unemployment. One effect of the high cost of labor is the effort upon the part of many contractors to improve their methods of operation, to adopt labor saving devices and to plan their work more economically in order to care for the higher labor rates by increased efficiency in production.

Trend in School Supply Prices

The final index of school supply prices for October is 94.8. The preliminary estimates for November and December indicate a marked decline in the school supply index to a new low level for the year. The basic materials from which school supplies are largely made are now selling for approximately 7 per cent less than the average of the corresponding prices in 1926. Lower

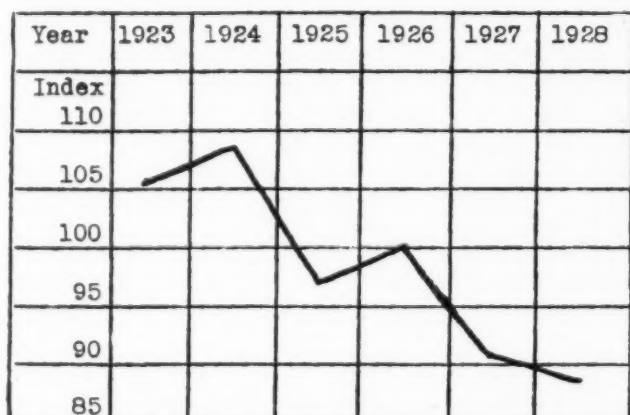


Chart 3. Annual index of the prices of instructional supplies.

prices in school supplies should be expected to follow the downward course of the basic material prices.

Six of the more commonly used indexes of general commodity prices have shown rather marked declines during October and November. Present indications are that paper prices will not move upward during the next four months, and that they may decline even to lower levels.

Among the materials entering into the construction of the final index for October, there are seven commodities showing an increase. Seven remain constant and eight are moving upward. It is quite apparent that the prices of the various commodities do not all move in a general direction. From the mass of fluctuating price trends, the index of school supply prices attempts to pick out the trend which best represents all the commodities in proportion to their importance. The index of school supply prices is representative of the group of commodities as a whole, and rarely can be taken as representative for any single commodity.

Planning the School Building to Conserve the Pupils' Health

Conserving the health of children in the public schools is made the theme of a statement recently issued by the U. S. Public Health Service in which certain requirements are set forth as follows:

The school building should be so placed as to be readily accessible to groups of children. The dangers of traffic now have an important bearing on school location. The grounds should be well drained.

Trees are not to be considered a necessity on the school grounds. They should never be near enough to the building to cast a shadow over the windows. Landscaping should be done if there is room but it should not be given preference to the exclusion of playgrounds.

The exterior of the building should be as attractive as possible without interfering with the natural illumination of the rooms. No grade school should have more than three floors. The building naturally should be fire resistant. The exits from the building should be wide and all doors in the building should open outward.

Pure drinking water should be available in all schools. The corridor is the preferable location for the fountain. There should be one fountain to about fifty children. The only satisfactory fountain is that type that sends the water from the side of the bubbler and delivers the stream of water obliquely.

Where proper fountains cannot be provided, paper cups should be used. If ready made paper cups are too expensive, children can readily be taught to fold a paper cup.

When possible, wash bowls with hot water and a supply of liquid soap should be provided in every toilet room. One bowl to twenty children is the minimum number. Paper towels should be provided for drying purposes.

The NATION'S SCHOOLS

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Editorials

Federal Investigation of Rural Education

THE federal government has provided a large fund for the investigation of secondary education with a view principally to articulating high schools with elementary schools on the one side, and with teachers' colleges, liberal arts colleges, universities and technical schools on the other side. Educators everywhere are expecting much from this great and important enterprise. While the federal government is in the mood to lend aid in educational research it should provide for as thoroughgoing an investigation of rural education as it has provided for secondary education. Probably no one will deny that changing social and economic conditions are affecting rural as well as secondary education.

What to do with rural schools in order that they may meet the new conditions in American life is even more perplexing than what to do with junior or senior high schools. Whether to merge the one-room rural school with other schools in the locality and thus establish a consolidated school, or whether to retain the one-room school and modify the curriculum, improve the hygiene, build up the teaching personnel, and develop better means of transportation are problems that should receive comprehensive expert investigation, which most communities and even most states cannot undertake. There have, of course, been some careful and useful studies made of rural schools, but the data derived from this research have not been adequately organized and have been interpreted from the standpoint of the new needs that are constantly being precipitated upon rural schools.

The Supreme Need of the Hour— Vocational Guidance

THE Governor of New York has approved a bill providing for the establishment of vocational counselors in the public schools of the state. The sponsors of the bill hope and expect that sooner or later there will be a board of counselors in every community in the state, whose duty it will be to advise young people regarding opportunities in various vocations. It will be their further duty to study the aptitudes of each coun-

selee for the purpose of guiding him into the vocation for which he is best fitted by natural endowments, taking into account also his financial and social situation.

Along this line, college authorities are appealing for help in devising plans for the more careful selection of students so that there will not be so many misfits in college.

Within the last month, at least a half dozen university presidents have said publicly that some way must be found to dissuade young people from going to college who are not well adapted for the kind of work that is being done in colleges. Lafayette College, Easton, Pa., is taking a step in the direction of choosing students more carefully than has been done heretofore. Committees of alumni of the college have been appointed in a number of cities throughout the country for the purpose of having personal interviews with all candidates for admission to Lafayette. It is thought that in this way, some applicants who ought not to go to college will be stopped before they actually gain admission. This plan has desirable features; and if the alumni committees have sufficient understanding of the qualities of mind and character that a student should possess in order to do the work in Lafayette College successfully, it is probable that there will be fewer decapitations of students at Lafayette in the future than there have been in the past.

Plans of this sort are at best only temporary. Above everything else in education we need accurate methods of diagnosing the intellectual, temperamental and vocational interests and aptitudes of individual pupils. Until we have more dependable methods of diagnoses than we possess now guidance will be largely governed by guesswork. We have progressed farther in the study of the opportunities and needs in the several vocations than we have in devising ways and means of determining for what vocation an individual is best fitted. We ought for a time to use our resources for research largely for exploration in this field. Happily, the great educational foundations are devoting some of their funds to research in the field of vocational aptitudes, but we could profitably use for the next ten years many times more money than is being expended now in the study of practicable methods of vocational diagnosis. Every superintendent, principal and vocational director in America would feel better satisfied with his job and would rest more comfortably after the day's work if he could feel confident that we would soon be in possession of technique that would enable us accurately and adequately to tell for what kind of work each pupil in the schools is best adapted by nature.

Mandatory Training in Morals

AT THE present time several states are considering bills to make moral education mandatory in all public schools. Oregon has already written a Moral Education Bill on the statute books. The bill is phrased as follows:

"Section 1. It shall be the duty of each and every teacher employed to give instruction in the regular course of the first twelve grades of any public school in the State of Oregon, so to arrange and present his or her instructions as to give special emphasis to honesty, morality, courtesy, obedience to law, respect for the national flag, the constitution of the United States and the constitution of the State of Oregon; respect for parents and the home, the dignity and necessity of honest labor and other lessons of steadying influence which tend to promote and develop an upright and desirable citizenry.

"Section 2. For the purpose of this act, the state superintendent of public instruction shall prepare an outline with such suggestions as, in his judgment, will best accomplish the purpose set forth in Section 1, and shall incorporate the same in a course of study for the first twelve grades of all schools of the State of Oregon."

The American Federation of Teachers opposed this bill, while the Oregon Congress of Mothers and Parent-Teacher associations favored it. The teachers of the state took sides for and against it. Outside of Oregon there has been marked difference of opinion regarding the need or the probable effectiveness of this bill. Some commentators have said that it is useless and that pupils are already learning the lessons the bill aims to have inculcated. On the other hand, there are many earnest persons who think that in Oregon as in other states the young are headed for perdition, and something of a specific and dynamic character must be done to instill in the rising generation such ideas and ideals as are specified in the Oregon bill. The discussion is acute in the professional and secular press and there is no evidence that either group is giving way in any respect to the opposing group.

A study that was made a few years ago of the effect of explicit moral instruction in the schools of France may be mentioned in this connection. Every day every pupil in the elementary schools and in the lycées received lessons covering all the matters mentioned in the Oregon Moral Education Bill, and some other matters in addition. The pupils learned moral lessons in textbooks and recited them to the teachers. The conclusion that was reached was that this instruction did not function in the daily life of pupils outside of school. It

seemed to be largely neutral. The pupils appeared to recite their lessons from memory without feeling keenly the ethical or moral significance or obligation of the rules, regulations and principles which they recited verbatim. The lessons were phrased in a formal, conventional, stereotyped and platitudinous way that did not seem to make any impression on the ethical, moral or social ideals and impulses of the young people of the country.

In the current discussion of the Oregon bill, some critics are maintaining that moral training should proceed in connection with, grow out of and be directly related to the regular life of the school and of the playground. They hold that ethical, moral and social training detached from the situations and emergencies of every-day life may do more harm than good. This view is in accord with the general principles of educational psychology. We have already abandoned, or are rapidly abandoning the view that a young person can acquire formal knowledge in conventional phrasing, and some time later apply it to the actual situations he will encounter in daily life. This fundamental tenet of American educational psychology is without doubt particularly applicable to ethical, social and moral education of young people of this country.

At the same time, the objective that the Oregon bill seeks to attain is a highly important one. We are not, incidentally, developing ethical, social and moral ideas and ideals adequate to the requirements of contemporary American life. Young people are not gaining from their arithmetic, grammar, algebra, physics, ancient history, geography, spelling, writing and so on, the kind of training that is equipping them to adjust themselves to the new developments in their lives in accordance with ethical, social and moral requirements. This subject has been discussed in *The NATION'S SCHOOLS* on several occasions and it is not necessary to cite evidence here to show that young people are abandoning some of the ethical, social and moral principles and practices that have been fundamental in the building of American civilization.

Does *The NATION'S SCHOOLS* commend the Oregon Moral Education Bill? It can approve the aim of the bill but whether it can approve the way in which this aim will be realized will depend upon the outline of work that the state superintendent in Oregon is commanded to prepare for the elementary and high schools of the state. If he can devise a method of instruction that will lead pupils to deal with the actual ethical, social and moral situations encountered in the classroom, on the playground, on the way to and from

school, in the home and in the amusement theater, the course in moral education will probably prove to be valuable. It is in accordance with American educational psychology that a pupil will be benefited by analyzing a situation and arriving at and stating a conclusion relating to the proper mode of conduct in the situation in question.

In the hands of a skillful teacher, the success of the Oregon Moral Education Bill should prove to be of ethical, social and moral value for the rising generation in Oregon. In the hands of a conventional, formal, platitudinous teacher, the Oregon bill will be a dismal failure. Other states will watch the experiment in Oregon with lively and hopeful interest.



Propaganda Must Be Banished

IT IS difficult to understand just how the minds of propagandists function when it comes to the introduction of their pet theories into the school systems of the country. When large corporations have in the past been successful in introducing propaganda into the schools it can be readily understood that it was done purely on a business basis and was calculated to turn the minds of the pupils in their direction. This of course is morally wrong but the theory has long been in existence that corporations have no souls and can be dealt with accordingly.

There is, however, another and more vicious type of propagandist whose activities must be curbed. One of the functions of education is to train the growing mind to a thorough understanding of logic and to enable it to reason out all problems that will in adulthood have to be faced. To poison the minds of children with false or antiquated statements, most of them not founded upon anything stronger than the propagandist's prejudice, is perhaps the most pernicious practice of the professional exhorter whose daily bread depends upon his ability to force his bias upon others.

The schools must be kept free from all propaganda and it is the duty of the superintendent to protect the children from it. Morals are largely a matter of intelligent instruction and the child will be guided into proper living habits and proper thinking habits much more surely if he is taught the value of a broad understanding of life as it exists, rather than by the reverse method of over-emphasizing its pitfalls. Curiosity plays such a dominant rôle in the formation of the mind that it is extremely dangerous and short-sighted to excite this curiosity by picturing existing evils in lurid terms.

Atlantic City Meeting to Celebrate Sixty Years of Service

WHEN President Cody taps his gavel to open the Atlantic City convention of the Department of Superintendence, he will usher in the sixtieth anniversary of the organization. Six decades ago this department commenced its service to the administrators of the public schools. Little did its founders dream of

The most capable school men of the country have contributed to the convention programs. The group meetings have offered ample opportunity for discussion of various specific phases of the convention theme. The superintendent who attends the convention and visits the excellent and well managed exhibits may become informed regarding modern scientific school furniture and equipment. Plans are also laid at these meetings for other educational activities. Immediately after the annual meeting all addresses are printed in a 300-page book which is mailed within two weeks to every member. This is of special assistance to superintendents in presenting reports of the meeting to boards of education and other groups.

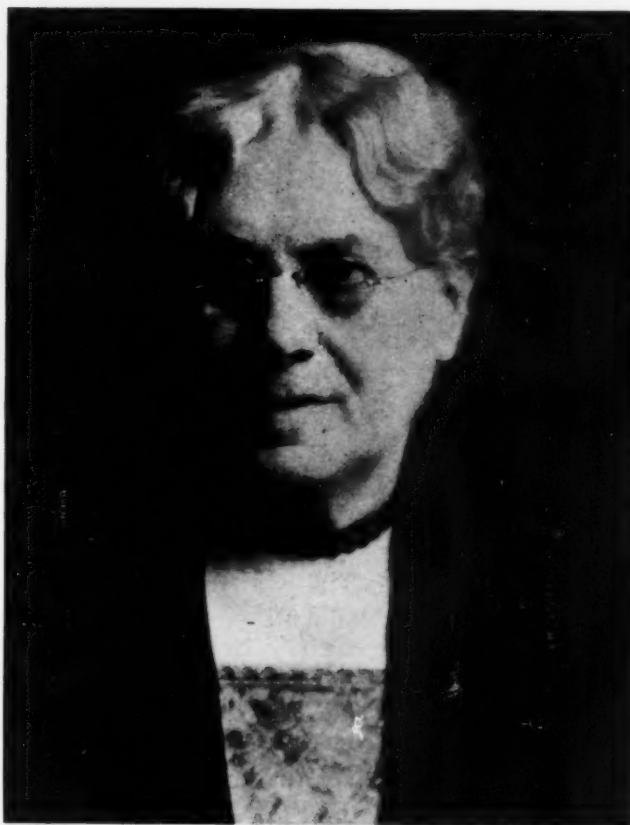
The result of all this has been that the foremost educational thoughts and techniques have been carried into remote sections of the country, bringing new enthusiasm and new vision. In-



Frank Cody, superintendent of schools, Detroit, and president, Department of Superintendence.

the significance it would come to have in the scheme of American education. Probably no other organization has as great a hold on educational administration or renders a service comparable to that of the Department of Superintendence. What are some of the contributions it makes?

For threescore years the leading state, city and county superintendents, along with other prominent educators, have met annually to discuss educational topics, to learn new plans, methods and devices, and to join in professional fellowship.



Susan M. Dorsey, superintendent emeritus, Los Angeles, California.

evitably, these meetings have raised the standard of school systems throughout the land.

Yearbooks have been published annually since 1923 and are doubtless the greatest single contribution of the department. These are prepared by commissions appointed several years in advance, with the cooperation of the research division of the National Education Association. The work of the curriculum commission, which produced a series of notable yearbooks, has stimulated a nationwide study of curriculums by local systems, each intent on improving and adapting its program to its own situation, but with complete knowledge of the best practices throughout



Dr. William John Cooper, U. S. Commissioner of Education, Washington, D. C.

the country. The titles of the yearbooks that have been issued are: "The Status of the Superintendent;" "The Elementary School Curriculum;" "Research in Constructing the Elementary School Curriculum;" "The Nation at Work on the Public School Curriculum;" "The Junior High School Curriculum;" "The Development of the High School Curriculum;" "The Articulation of the Units of American Education," and "The Superintendent Ponders Supervision."

One indication of the popularity and usefulness of these yearbooks is the fact that the fourth was reprinted recently as a third edition.

The Department of Superintendence and the

research division of the National Education Association work in complete harmony. The research bulletins go to all members of the Department of Superintendence. They deal accurately and scientifically with current problems of education and are of special value to superintendents. In collaboration with the research division, the educational research service goes monthly to over two hundred and fifty school systems. It costs each subscriber \$25 a year. This service is now entirely self-supporting. Books, bulletins, circulars and special tabulations that contain up-to-date information on school practice are issued. Each subscriber is assured of individual assistance in response to requests for information. A school research exchange among the subscribers has been developed by means of which the educational research service reports studies completed and in progress in city school systems.

Fund to Be Raised for Yearbooks

Owing to the high cost of the preparation of yearbooks and of the conduct of research, the department has on foot a program for raising a fund sufficient to provide a continuous and dependable source of income for carrying on this work. The committee to which the task has been assigned presented a preliminary report at Boston and a second at Cleveland, which indicated substantial progress. This endowment will be a contribution not only to the department and its members but to the whole of American education. The plan is to obtain small contributions from many superintendents rather than a large grant from a foundation. Hundreds of superintendents will wish to contribute and thus have a definite part in this great movement.

It would be difficult to imagine the superintendent of schools out of contact with his fellows. If the Department of Superintendence performed no other service than to bring its members together annually, it would be rendering a signal contribution. Through its conventions, yearbooks and research studies the department stimulates professional enthusiasm and acts as a clearing house for everything of concern to the school administrator. With the majority of school superintendents banded together in one organization, the best practices tend to find their way about much more rapidly than would otherwise be possible.

In 1921, the department was reorganized under a new constitution with provision for a full-time executive secretary. A full-time staff of eight persons, with additional help at convention time, assists in caring for the rapidly increasing responsibilities of the office. This office also carries

the responsibility for the headquarters activities of several other administrative departments and organizations.

At the forthcoming convention, discussions and papers will center about the convention theme: "Education in the Spirit of Life. Education is life. This statement of the philosopher, which seemed so radical when first uttered, is now generally accepted. American education is engaged in the process of putting this ideal into practice, because educational leaders are firmly convinced that as the nation would have life, so must its education be."

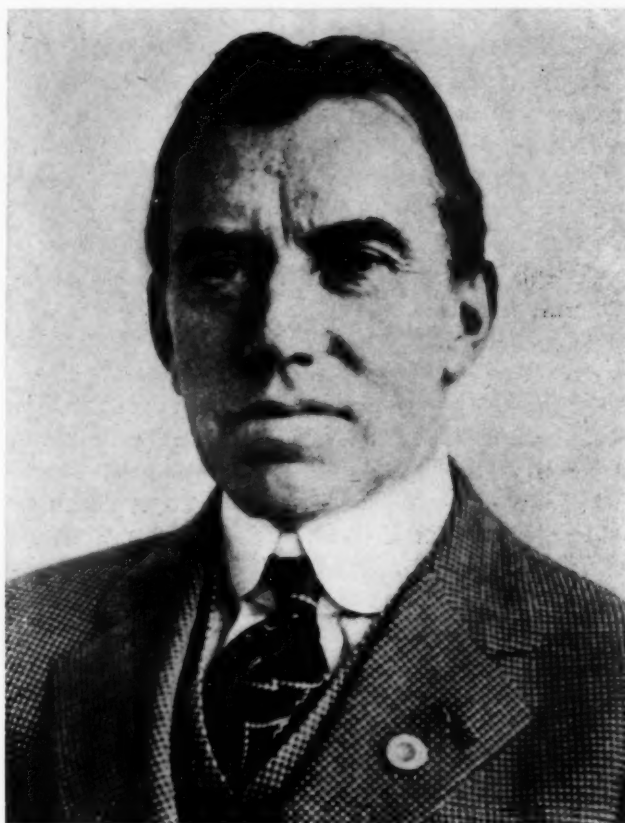
Formal opening of the exhibits will be the feature of the first general session of the convention at 1:30 p.m. Saturday, February 22.

The first phase of the general theme will be stressed at the vesper service at 4:00 p.m. Sunday. The special theme for this general session will emphasize the fact that because life is idealistic, education must aim high. At 8:00 p.m. there will be a recital by the New Jersey All State Orchestra.

Swinging into the second aspect of the general theme at 9:00 a.m. Monday, February 24, the general session will discuss the thought that education must develop a social spirit because life is friendly. Administrative groups will meet at 2:30 p.m. to consider topics selected by the chair-



Walter A. Jessup, president, State University of Iowa.



Dr. John H. Finley, associate editor, New York Times.

man. The groups will be arranged according to the size of the cities they represent. The general session at 8:00 p.m. will focus attention upon the proposition that education must move forward aggressively because life is dynamic.

Topic four of the general theme, the fact that education must be efficient because life is practical, will be developed in the general session and business meeting at 9:00 a.m. Tuesday, February 25. At 2:30 p.m. discussion groups, arranged according to subjects, will investigate themes selected to supplement the Tuesday morning general session. A pageant, depicting the thesis that education must train for leisure because life is recreative, will feature the general session at 8:00 p.m.

Those who believe that "the most certain thing in life is uncertainty" will be especially interested in the general session to be held at 9:00 a.m. Wednesday, February 26. At this session the proposition that education must adjust itself to new needs because life is progressive will be carefully analyzed. Problems of supervision will be considered at 2:30 p.m. by administrative groups. College dinners at 6:00 p.m. will lend an enjoyable atmosphere to the social functions of the convention. At 8:00 p.m. there will be a rehearsal of the National High School Orchestra, open to the public.

In the general session at 9:00 a.m. on Thursday, February 27, attention will center upon the declaration that education must itself cooperate because life is cooperative. A grand concert of the National High School Orchestra will entertain the superintendents at the final general session at 2:00 p.m. Thursday.

The following are some of the allied departments and organizations interested in the convention that have been invited to participate in the meeting: the American Educational Research Association (president, J. Cayce Morrison, State Education Department, Albany, N. Y.; secretary-treasurer, William S. Gray, School of Education, University of Chicago); Department of Rural Education (president, Mabel Carney, Teachers College, Columbia University; secretary, Katherine M. Cook, U. S. Bureau of Education, Washington, D. C.); Department of Secondary School Principals (president, Milo H. Stuart, principal, Arsenal Technical High School, Indianapolis; secretary-treasurer, H. V. Church, superintendent, Morton Secondary Schools, Cicero, Ill.); Department of Supervisors and Directors of Instruction (president, Frank M. Underwood, district superintendent of schools, St. Louis; secretary-treasurer, James F. Hosic, Teachers College, Columbia University); Department of Vocational

Education (president, Paul W. Chapman, state director of vocational education, Athens, Ga.; secretary, Ray Fife, state supervisor of agricultural education, Columbus, Ohio); Municipal Normal School and Teachers College Section (chairman, Warren E. Bow, dean, Detroit Teachers College; secretary-treasurer, Frank Webster Smith, 35 N. Maple Avenue, Ridgewood, N. J.); National Association of High School Inspectors and Supervisors (president, C. Lloyd Goodrich, deputy superintendent of education, Lansing, Mich.; secretary-treasurer, J. S. Stewart, University of Georgia, Athens, Ga.); National Council of Education (president, Henry Lester Smith, School of Education, Indiana University, Bloomington; secretary, Adelaide S. Baylor, 200 New Jersey Avenue, Washington, D. C.); National Council of State Superintendents (president, A. B. Meredith, state superintendent of public instruction, Hartford, Conn.; secretary, Agnes Samuelson, state superintendent of public instruction, Des Moines, Iowa); National Society for the Study of Education (chairman, board of directors, Leonard V. Koos, University of Chicago; secretary-treasurer, Guy M. Whipple, 10 Putnam Street, Danvers, Mass.).

Outstanding leaders in educational administration will contribute their best thoughts to the symposiums which will show education as an idealistic, friendly, dynamic, practical, recreative, progressive and cooperative tool for the building of a citizenry equipped to meet life's problems.

At the opening of the exhibits Saturday afternoon, Frank Bruce, editor, *American School Board Journal*, will preside. The convention will be officially opened by Frank Cody, superintendent of schools, Detroit, president of the Department of Superintendence, National Education Association.

Norman R. Crozier, superintendent of schools, Dallas, Texas, will preside at the third general session on Sunday. Charles H. Elliott, state commissioner of education, Trenton, N. J., will present greetings from New Jersey.

Presidential Address to Be Given Monday

Friendliness in education will be considered from four different viewpoints Monday morning. Subjects and speakers are as follows: "Friendliness in Pupil-Teacher Relationships," Edith B. Joynes, president, Department of Classroom Teachers, N. E. A., 1928-29; "Friendliness in Teacher-Superintendent Relationships," Susan M. Dorsey, superintendent emeritus, Los Angeles, Calif.; "Friendliness in Relationships Between Public and Parochial Schools," Father J. Elliot Ross, chaplain to Catholic students, State Univer-



George Melcher, superintendent of schools, Kansas City, Missouri.

sity of Iowa; "Friendliness in School-Community Relationships," Paul C. Stetson, superintendent of schools, Dayton, Ohio. At this meeting the presidential address will be given by Frank Cody. There will also be a business session.

Administrative Groups to Meet

Chairmen of administrative groups have been appointed as follows for the Monday afternoon session: Group 1, State Departments of Education, Charles H. Elliott, state commissioner of education, Trenton, N. J.; Group 2, County Superintendents, Kate Wofford, county superintendent of schools, Laurens, S. C.; Group 3, Superintendents of Cities With a Population of Less Than 10,000, John L. Bracken, superintendent of schools, Clayton, Mo.; Group 4, Superintendents of Cities With a Population From 10,000 to 50,000, A. W. Elliott, superintendent of schools, Mt. Vernon, Ohio; Group 5, Superintendents of Cities With Populations from 50,000 to 100,000, J. W. Sexton, superintendent of schools, Lansing, Mich.; Group 6, Superintendents of Cities With Populations From 100,000 to 200,000, A. H. Hughey, superintendent of schools, El Paso, Texas; Group 7, Superintendents of Cities With Population Over 200,000, William J. Bogan, superintendent of schools, Chicago; Group 8, City Assistant and District Superintendents, Arthur C. Perry, district superintendent of schools, New York City; Group 9, Health and Physical Education, James E. Rogers, 315 Fourth Avenue, New York City; Group 10, National Council of Childhood Education, Lois Hayden Meek, associate director, Child Development Institute, Teachers College, Columbia University.

Achievements of American education along practical lines of efficient instruction and administration will be reviewed Tuesday morning. The topics will be covered by the following speakers: Instruction, Charles H. Judd, director, School of Education, University of Chicago; Organization, John H. Logan, superintendent of schools, Newark, N. J.; Administration, J. B. Edmonson, dean, School of Education, University of Michigan; the School Plant, N. L. Englehardt, Teachers College, Columbia University; Personnel, C. B. Glenn, superintendent of schools, Birmingham, Ala.; Finance, Frank W. Ballou, superintendent of schools, Washington, D. C.; Public Relations, Francis G. Blair, state superintendent of public instruction, Springfield, Ill.

The sixty years of progress of the association will be symbolized by the introduction of past presidents and honorary members. At the business meeting, officers will be nominated.

The following chairmen of discussion groups

for Tuesday afternoon have been appointed: Group 1, Instruction (Materials of Teaching), J. F. Noonan, superintendent of schools, Mahanoy City, Pa.; Group 2, Instruction (Methods of Teaching), C. H. Garwood, superintendent of schools, Harrisburg, Pa.; Group 3, Instruction (Measurement), George F. Arps, dean, College of Education, Ohio State University, Columbus; Group 4, Organization, Walter R. Hepner, superintendent of schools, San Diego, Calif.; Group 5, Administration, M. C. Potter, superintendent of schools, Milwaukee, Wis.; Group 6, The School Plant (Buildings and Equipment), H. W. Anderson, deputy superintendent of schools, Denver, Colo.; Group 7, The School Plant (Operation and Maintenance), Nicholas Bauer, superintendent of schools, New Orleans; Group 8, Personnel (Rating and Standards), Rose A. Pesta, assistant superintendent of schools, Chicago; Group 9, Personnel (Salaries), George Melcher, superintendent of schools, Kansas City, Mo.; Group 10, Finance, David E. Weglein, superintendent of schools, Baltimore; Group 11, Public Relations (Publicity Program), J. J. Early, superintendent of schools, Sheridan, Wyo.; Group 12, Public Relations (Cooperation With Outside Organizations), Thomas R. Cole, Seattle, Wash.

To coordinate discussion of the thesis, "Prog-



Charles H. Judd, director, school of education, University of Chicago.

ress Through Supervision," on Wednesday afternoon the following chairmen of administrative groups have been named: Group 1, State Departments of Education, Charles H. Elliott, state commissioner of education, Trenton, N. J.; Group 2, County Superintendents, Kate Wofford; Group 3, Superintendents of Cities With Population of Less Than 10,000, John L. Bracken, superintendent of schools, Clayton, Mo.; Group 4, Superintendents of Cities With Population From 10,000 to 50,000, A. W. Elliott; Group 5, Superintendents of Cities With Population From 50,000 to 100,000, J. W. Sexton, superintendent of schools, Lansing, Mich.; Group 6, Superintendents of Cities With Population From 100,000 to 200,000, A. H. Hughey, superintendent of schools, El Paso, Texas; Group 7, Superintendents of Cities With Population Over 200,000, William J. Bogan.

The program of the National Society for the Study of Education will deal with the "Yearbook in Arithmetic" which will be published in 1930. Among the speakers will be: F. B. Knight, University of Iowa; B. R. Buckingham, Harvard University; R. L. West, Department of Public Instruction, Trenton, N. J.; C. E. Greene, Director of Research, Denver, Colo.; W. J. Osburn, State Department of Education, Columbus, Ohio; A. W. Kallom, Department of Education Investigation, Boston; Clifford Woody, Bureau of Education Reference, University of Michigan; G. M. Wilson, Boston University; G. T. Buswell, University of Chicago; W. A. Brownell, George Peabody College for Teachers, Nashville, Tenn.; Velda Bamesberger, director of elementary education, Toledo, Ohio; L. J. Brueckner, University of Minnesota; Ernest Horn, University of Iowa; F. B. Knight, University of Iowa, J. H. Beveridge, superintendent of schools, Omaha, Nebr.; Will French, associate superintendent of schools, Tulsa, Okla., and R. L. Morton, Ohio University.

Rural Education to Be Discussed

General sessions of the department of rural education will center about our American rural heritage and its contributions to national life.

Our American rural heritage and its contributions to national welfare and character will be analyzed on Monday afternoon by the following speakers: Carl C. Taylor, professor of rural sociology and dean of the graduate school, North Carolina State College, Raleigh; Edmund de S. Brunner, rural specialist, Institute of Social and Religious Research, 230 Park Avenue, New York City; John Finley, associate editor, *New York Times*, and Thomas Jesse Jones, educational director, Phelps-Stokes Fund, 101 Park Avenue, New York City.

Some factors involved in the preservation and development of our rural heritage will be considered in the Tuesday morning session by the following discussants: Alexander Legge, chairman of the federal farm board, Washington, D. C.; Benson Y. Landis, secretary, American Country Life Association, New York City; John D. Willard, American Association for Adult Education, New York City, and William John Cooper, U. S. Commissioner of Education, Washington, D. C.

Education as a basic essential in the preservation and development of our rural heritage will be treated by these speakers Tuesday afternoon: Allen Hulsizer, director of the Experimental Elementary School for the State of Delaware, Wilmington; Helen Hay Heyl, assistant in rural education, State Department of Education, Albany, N. Y., and Ellwood P. Cubberly, dean of the



Sherwood D. Shankland, executive secretary, Department of Superintendence.

School of Education, Leland Stanford Junior University, Palo Alto, Calif.

The first section meeting will examine the question of leadership of the state rural supervisor under the chairmanship of U. J. Hoffman, supervisor of country and village elementary schools, State Department of Education, Springfield, Ill. Among those who will speak to the state supervisors and inspectors of rural schools are: H. C. Taylor, director of the Vermont Com-

mission on Country Life, Burlington; Helen Hefernan, chief of the division of rural education, state department of education, Sacramento, Calif.; Anna Swenson, assistant director, ungraded elementary schools, state department of education, St. Paul, Minn.; Justin Washburn, county superintendent of schools, Rock Island, Ill., and Margaret Harrison, director of rural school radio research, Teachers College, Columbia University.

County superintendents and rural school supervisors will meet in joint session with the county superintendents' section of the Department of Superintendence, Wednesday, February 26. Under the chairmanship of Kate V. Wofford, the following speakers will cover various aspects of rural school administration and supervision: G. Watts Cunningham, Sage School of Philosophy, Cornell University, Ithaca, N. Y.; A. S. Barr, School of Education, University of Wisconsin; Ruth M. Johnston, Port Leyden, N. Y.; George Howard, county superintendent of schools, Salisbury, N. C., and A. F. Harman, state superintendent of education, Montgomery, Ala.

Educational Trends to Be Noted

Directors and supervisors of rural teacher training will meet Wednesday afternoon under the chairmanship of J. C. Muerman, director of rural education, Southeast Teachers College, Durant, Okla. On this program the following will speak: Verne McGuffey, Jamaica Training School for Teachers, Jamaica, Long Island; A. B. Meredith, commissioner of education, Hartford, Conn.; Cora J. Russell, rural specialist, Normal School, Danbury, Conn.; George W. Rosenlof, director of teacher training, state department of public instruction, Lincoln, Nebr.; L. W. Hacker, director of rural education, State Normal University, Normal, Ill., and Katherine M. Cook, specialist in rural education, United States Office of Education, Washington, D. C.

Plans are carefully laid for the smooth functioning of the convention. Sixty years of organized effort will be celebrated, and there will be a forecast of the trends that education will take during the sixty years that lie before American school superintendents. The progress already made in the relation of educational processes to training for life will be noted only as a foundation upon which to build a more flexible structure to meet the ever increasing demands that will be made upon the schools of the nation. The superintendent who wishes to keep abreast of these policies will surely profit from attendance at the Atlantic City convention.

Public Education and the Adjustment of Youth to Life

An appraisal of contemporary public education, as it affects the adjustment of youth to vocational life in the United States, is declared to have become a pressing need by the National Industrial Conference Board, which proposes the organization of a national educational survey commission for this purpose. The proposal is contained in a monograph entitled "The Conditions of Public Education as Affecting the Adjustment of Youth to Life."

Rapidly changing economic and social environment, in the light of a brief preliminary examination of the subject by the conference board, has made it inevitable that some maladjustment has come into existence as between the present public educational system and the conditions under which most young persons must begin to earn their living. While the board warns against general criticism of the public school system as a whole, it declares that specific criticism based on fact and experience may be made with propriety.

Criticism leveled against the public schools by employers, while in some cases doubtlessly justified, the board declares, too often neglects to consider the broader objectives of public education and ignores as well the employers' own responsibility of cooperation with the schools in making public education a more adequate means of preparing children for their probable vocation and their future duties as citizens. Likewise, it may be observed that professional educators in many cases have lacked the practical knowledge of business life properly to adapt the educational program to the rapidly changing demands made by the business world upon young persons.

In the view of the conference board, no single group or interest of society is equipped to undertake the full responsibility for evaluating the adequacy of the existing system to prepare the youth of to-day to adjust itself to the rapidly changing economic and social environment, since each group would view the problem primarily from the standpoint of its own interest. The board, therefore, proposes that a comprehensive investigation of nationwide scope be undertaken by a group of men and women of the widest possible experience, capacity and vision representing all economic and social groups having a major interest in the educational problem, as those concerned with problems of labor, public health and social hygiene, those engaged in teaching and educational administration and in the many branches of business. These will constitute the national educational survey committee.

Your Every-day Problems

JOHN GUY FOWLKES, THE UNIVERSITY OF WISCONSIN, DIRECTOR

This department will be devoted to an informal discussion of problems arising in the every-day life of principals and superintendents. The following discussions are based on answers to inquiries received recently by the director of the department. Similar inquiries are invited and should be addressed to Dr. John Guy Fowlkes, Department of Education, University of Wisconsin, Madison, Wisconsin.

What Is the Fiscal Status of a Board of Education?

The following letter from one of our larger cities shows that the problem of organization and functions of boards of education and superintendents of schools is still very much alive.

"Mr.—, business superintendent of schools at —, has instructed me to procure any information available on the subject of control over the business affairs of a board of education by a municipal agency other than the board of education. He was of the impression that you could give me subject material and citations of court cases on the subject.

Should Board Be Fiscally Independent?

"At the present time a group of public-spirited citizens are making a study of the municipal business affairs, and in this connection they have asked for a report from the board of education as to its experience under the present city purchasing plan, as well as other information relative to the practice of other cities in the matter of purchasing and the control of such purchasing. We should, therefore, appreciate any data you may have, citations of court cases, and any material that will enable us effectively to present our case to this investigating body."

This inquiry concerning the control of business affairs of a board of education by a municipal agency rather than by the board of education, as well as the matter of purchasing for schools, brings up two fundamental questions: (1) Shall the board of education be fiscally independent? (2) Shall local school systems be administered under a single or multiple scheme of organization? Fiscal independence may be defined as that status enjoyed by a board of education under which the board of education has the right to determine the amount of money needed for local schools, to levy taxes and to collect and spend

such necessary funds independently of all other agencies, except those coming under regular statutory provisions.

There have been two excellent studies on the fiscal status of the board of education. The first of these, entitled "The Control of City School Finances" by George W. Frasier, appeared in 1922. In this study Doctor Frasier, by means of an index number for city school systems composed of six nonfinancial factors, attempted to evaluate the relative efficiency of school systems under fiscal dependence and fiscal independence. These factors are: the percentage of sixteen and seventeen year old children in school; the percentage of elementary classes having fewer than forty children enrolled; the percentage of children who have 60 square feet or more playground space; the percentage of teachers who have six or more years' training above the eighth grade; the percentage of children enrolled who attend school all day in adequate buildings owned by the city; the percentage of the increased cost of living from 1913-14 to 1919-20 that was met by increased salaries for women teachers in elementary schools.

Fiscal Status of School Boards

The conclusions of Doctor Frasier's study are entitled, "The Case for Fiscal Independence," the major headings of which include: Fiscal independence is right in principle; fiscal independence is not a violation of the principles of taxation; fiscal independence works better in practice; fiscal independence promotes continuity of educational policy; fiscal independence provides adequate financial safeguards for the community; fiscal independence tends to keep politics out of the schools.

The second major study concerning the fiscal status of boards of education is entitled "The Fiscal Administration of City School Systems," by J. R. McGaughy. This volume appeared as

TABLE SHOWING DIFFERENCES BETWEEN FISCALLY DEPENDENT AND FISCALLY INDEPENDENT SCHOOL SYSTEMS

A—Significant Differences		City Group Having Larger Average	City Group Having Smaller Average	Critical Ratio of Differences Between Averages
1. Financial Factors				
a. Percentage of real valuation at which taxable property is assessed	Dependent	Independent	9.7	
b. School tax rates per \$100 real valuation.....	Independent	Dependent	3.4	
c. Percentage which school tax rate is of total municipal tax rate	Independent	Dependent	5.8	
d. Municipal bonded indebtedness outstanding per capita	Dependent	Independent	4.8	
e. Percentage which school bonded debt is of total municipal bonded debt	Independent	Dependent	3.7	
f. Percentage which total municipal bonded debt is of total real valuation of taxable property	Dependent	Independent	3.0	
g. General control, expense per pupil in A.D.A....	Independent	Dependent	4.6	
h. Instructional service, per pupil.....	Dependent	Independent	4.6	
i. Teachers' salaries, per pupil.....	Dependent	Independent	4.1	
j. Maintenance of plant, per pupil.....	Independent	Dependent	3.1	
k. Fixed charges, per pupil.....	Independent	Dependent	15.0	
l. Capital outlay, per pupil.....	Independent	Dependent	10.2	
m. Debt service, per pupil.....	Independent	Dependent	5.6	
n. Percentage of increased cost of living from 1913-14 to 1919-20 that was met by increased salaries for women elementary teachers.....	Independent	Dependent	3.0	
2. Educational Factors				
a. Percentage of sixteen and seventeen year old children in school	Independent	Dependent	4.4	
b. Percentage of pupils having 60 or more square feet of playground each.....	Independent	Dependent	4.5	
c. Percentage of women elementary teachers having six or more years of training above eighth grade	Dependent	Independent	3.2	
d. Percentage of children enrolled who attend school all day, and in adequate buildings owned by the city.....	Independent	Dependent	3.4	
e. Frasier's Index of School Efficiency	Independent	Dependent	3.6	
B—Differences Probably Not Significant				
1. Financial Factors				
a. Percentage of total school revenue derived from local taxation	Independent	Dependent	0.5	
b. Real valuation of taxable property per capita	Dependent	Independent	2.1	
c. Total municipal tax rates per \$100 real valuation	Dependent	Independent	1.3	
d. School bonded indebtedness per pupil in A.D.A.	Dependent	Independent	2.2	
e. Percentage which school bonded debt is of real valuation of taxable property.....	Independent	Dependent	0.8	
f. Total expense for all school purposes per pupil in A.D.A.	Dependent	Independent	0.3	
g. Current expense for schools, per pupil.....	Dependent	Independent	2.4	
h. Operation of plant, per pupil.....	Dependent	Independent	0.1	
i. Auxiliary agencies, per pupil.....	Dependent	Independent	1.9	
j. Health service, per pupil.....	Dependent	Independent	0.5	
2. Educational Factors				
a. Percentage of elementary classes having fewer than forty pupils enrolled.....	Dependent	Independent	1.3	

one of the volumes of the Educational Finance Series in 1924. Doctor McGaughy's study is based on 377 cities as compared with 169 cities considered by Doctor Frasier. A hundred and sixty-four of 169 cities used by Frasier as a basis for his study are included among the 377 cities used in McGaughy's study. To quote Doctor McGaughy: "In both size and location they are almost a perfect sampling of the entire group of cities." The general conclusions of Doctor McGaughy's study based only on the 164 cities used by Doctor Frasier are as follows:

When the 164 cities are classified into dependent, special and independent groups and a study is made of these groups with regard to each of the six factors making up Doctor Frasier's Index

of Efficiency, the conclusions drawn are that independent cities are much more successful in keeping their sixteen and seventeen year old children in school than are dependent cities; that independent and special cities provide much more adequate playground space for each pupil than do dependent cities; that in the dependent cities a greater percentage of the women elementary teachers have had six or more years of training above the eighth grade than have such teachers in the independent and special cities; that independent cities have a greater percentage of their pupils attending school all day, in adequate buildings owned by the city, than have the dependent cities; that independent cities were more successful in adjusting teachers' salaries so that they

kept pace with the increasing cost of living from 1913-14 to 1919-20 than were the dependent cities and that differences in the sizes of elementary school classes in the three groups of cities are probably not significant.

Statistical Studies Have Been Made

Doctor McGaughy also furnishes a rather detailed statistical summary of his study shown in the accompanying table on page 83.

Since this study has been chiefly concerned with the relationships of independent and dependent cities, it has seemed best to summarize the whole study for these two groups only. On this basis, significant differences are distinguished from those probably not significant. Each group of differences is subdivided into financial factors and educational factors. For each factor, the city group having the larger average is indicated, as well as the critical ratio¹ for the difference between the two group averages.

In the September, 1929, issue of *The NATION'S SCHOOLS* appeared an article entitled "Shall School Boards Be Fiscally Independent?" This article was centered around six factors that are frequently affected by the fiscal organization of the local school system: selection and tenure of the board of education; administrative organization of the school system; budgetary matter, such as current expenditures and capital outlay; development of school plant programs (sites and buildings); general administration; the curriculum. When these are analyzed, the case seems to be clear in favor of fiscal independence. A thesis written at the University of Wisconsin entitled "Fiscal Status of Boards of Education in Wisconsin" in 1924 also sets up a case for fiscal independence of boards of education.

The second major problem raised in the inquiry pertains to the organization of superintendents' offices and resolves itself into the question: Shall the administration of the local school system be centralized in the hands of the superintendent of schools or divided among the superintendent and various other agencies?

There have been three major studies concerning unitary *versus* multiple control of city school administration. These three studies are "The Business Administration of a City School System," by Harry P. Smith, "The Administration of Public Education in Centralized

and Coordinated Schools," by J. O. Marberry, and "The Present Status of Business Executives in the Public Schools of the United States in Cities of 25,000 and More Inhabitants," by Amos L. Heer. These studies attempt to compare the business efficiency of administration in unitary and multiple organization, and the cost of education under the two forms of organization. All of the studies establish a case for unitary rather than multiple control. In the June, 1923, number of the *American School Board Journal*, there appeared an article entitled "Some Business Elements of Educational Administration." In this article, the duties of educational administrators were outlined and a strong plea made for centralized or unitary control. In addition to these studies, many of the surveys made by the staff of the division of field studies, Institute of Educational Research, Teachers College, Columbia University, establish the case for centralized control in a most decisive fashion.

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The Earning Capacity of Women College Students

One out of every four college women in the United States contributes to her own support while attending college, according to the Office of Education, Department of the Interior, in a statement just made public.

The smallest percentage of employed women college students are enrolled in the women's colleges where expenses are highest, and in teachers' colleges where expenses are lowest. The coeducational colleges and universities enroll more than three times as many women who are employed compared with self-help women in all other institutions. The greatest number of employed college women are working in Illinois, New York, California, Pennsylvania, Maryland, Minnesota, Ohio and Washington.

In 1927-28 there were 33,856 college women enrolled in 359 institutions of higher education and they earned over \$5,000,000.

¹ Doctor McGaughy makes the following explanation: "The critical ratio is the quotient obtained by dividing the difference between two averages on an item by the probable error of that difference. If this ratio is 3 or more, it is accepted that the difference is real and significant, and not the result of inaccuracies or insufficient sampling of the total number of cases. On this basis, significant differences are those with a critical ratio of 3 or more. Differences not significant are those with a critical ratio of less than 3."

The Nursery School Movement at Home and Abroad

Several English and American books are available for those school administrators who are interested in this recent and significant educational experiment

BY ARTHUR B. MOEHLMAN, PROFESSOR OF ADMINISTRATION AND SUPERVISION, UNIVERSITY OF MICHIGAN

THE nursery school is one of the most recent and significant movements in the field of elementary education. It is still in the early experimental period and is limited largely to private effort and to our higher institutions of learning in different countries.

Objectives, methods, techniques and administration have not developed to the point where it is immediately practical to introduce the nursery school into the public schools. Tendencies and implications, however, are quite clear with respect to its future, and the movement should be given serious study by school administrators.

The nursery school movement may be defined as a formal institutional organization of children between the ages of two and five years, either for sociological or for educational purposes. This definition separates it from the informal prekindergarten work that is slowly developing in some of our public schools and also from the typical day nursery.

The nursery school is typically an English movement in its origin. The consultative committee of the English Board of Education recommended the establishment of nursery schools as early as 1907. The Education Act of 1918 made possible the operation and maintenance of nursery schools by local school authority. In 1923 there were twenty-five nursery schools recognized by the English Board of Education, less than half of which were maintained entirely by the state and the municipality.

Why England Has Nursery Schools

The English movement was the outgrowth of the medical inspection program started in 1908. This survey disclosed such serious physical conditions among the children of the poorer families that the state quickly recognized the necessity of caring for them properly. Further experience indicated that medical inspection and the education of parents in child care were not sufficient to remedy these serious conditions. The necessity of a controlled environment was early recognized

as a complementary need. The establishment of the nursery school was the result. While postwar conditions retarded the development of the movement, the principle has been accepted and established, and provision is gradually being made to develop and expand the nursery school movement. Since the English nursery school has been developed to save the child from the negative influence of economic poverty, the purpose of this institution must be considered primarily sociological in character.

What Russia Does for Babies

Since the establishment of the soviet government in Russia, the nursery school movement has been considered as an integral part of the state educational program. Here the state takes charge of the child at the age of two months. The purpose of the Russian nursery school is twofold. In its economic aspects it serves as an agency that releases the mother for service in the industries. In its educational aspects it marks the beginning of the child's education in the political, economic and social principles underlying the soviet government. The *yashi*, or nursery school, is attached to every Russian factory. Each unit cares for the children of mothers employed in that particular factory. Although run in conjunction with each factory, the organization is operated directly by the state. In addition to factory schools, similar units are attached to theaters, department stores and public parks.

The age limits of the Russian school are wider than those of the English schools. Children enter when they are two months old and remain until after their sixth birthday. In the earlier years, the personnel of the school is composed of doctors and nurses. In the later periods, medical and physical care is supplemented by direct teaching. Attendance is limited to children of the proletariat.

Many experimental schools, maintained both by the state and by private effort, may be found in Austria and Germany. The principal centers are

in Vienna and Berlin. The objectives of these experimental units appear to be research and educational.

In America the nursery school movement was not stimulated by the same motives as in England. It is one of the direct outcomes of the scientific movement in public education. Educators, biologists, psychologists, physiologists, sociologists and medical men have been evincing a deep interest in the so-called preschool child. Their attitude has been one of scientific research to secure objective information with respect to early child development. Most of this experimental activity has been confined to colleges of education and departments of psychology in universities, to privately endowed centers and to parents who feel the need for greater knowledge in the field of child care and training. The approach to the nursery school problem in this country has been primarily educational. It has been a recognition of the educational values of the kindergarten and their extension downward.

The movement in the United States has been stimulated by the work in England and the methods in use in this country have been influenced accordingly. Many of the teachers in experimental centers have either been trained in England or have worked under the direction of teachers trained there.

American Schools Are Experimental

One of the first experimental attempts to present the problems of nursery school education to this country was made by Teachers College, Columbia University, in the summer of 1922. Experimental clinics at Yale, 1920, and at the University of Iowa, 1921, were confined largely to the psychological side. Present outstanding centers include: the Institute of Child Welfare and Research, Teachers College, 1923; the Merrill-Palmer School, Detroit; the Walden School, New York City; the Ruggles Street School, Cambridge; University of Chicago; University of Iowa; University of Minnesota; Peabody College, Nashville, Tenn.; the Yale Psycho-Clinic; Mills College, California, and the University of California, Berkeley.

The extent of the movement in both publicly and privately financed experimental centers is such that careful study of its possibilities and its implications is demanded of progressive school administrators. How rapidly this movement will progress and how soon it will become an integral part of elementary education is difficult to state. Careful and thoughtful study in advance of its inclusion in the elementary organization will prevent an occurrence of the administrative mistakes that followed the introduction of the kindergar-

ten and its lack of integration into the elementary program. For those who wish to avail themselves of this opportunity, there is now available good literature that will assist materially in orienting the problem and in recognizing its immediate and ultimate possibilities. The "Twenty-Eighth Year Book of the National Society for the Study of Education" was devoted to preschool and parental education. Other publications, not so widely known, will be discussed here.

New Books Explain Movement

For those interested in the English attitude and in the development of the socio-nursery school there are several worth while books. "Nursery School Education," edited by Grace Owen, is a symposium upon the English nursery school. The editor discusses the aims and functions of the nursery school and a chapter by Olive A. Wheeler is devoted to "The Mind of the Child." With this setting Grace Owen, Margaret E. Eggar, and Catherine Chisholm discuss in some detail the plan of education for the nursery child and the hygiene of the nursery school. In conclusion, the editor presents the personnel and physical requirements of the new school. Photographs of several English schools are presented, together with a plan for what the editor considers to be an ideal English nursery school.

Margaret McMillan, who introduced the nursery school idea at Teachers College, is author of the second book entitled "The Nursery School." An introduction by Patty Hill Smith serves to orient her product to this country. Margaret McMillan, her sister, Rachel, and Grace Owen rank high among the English leaders in the nursery school movement. Margaret McMillan's work started with the neighborhood health clinic. The ineffectiveness of this work, especially with respect to children so long as there was no environmental control, gradually led her into nursery school work. Instead of building centers in the country, the most generally accepted fresh air environment, she decided to build them within the city, where these garden spots might mitigate the negative aspects of the poorer districts. The book is primarily a description of her work in these centers and, as such, presents a clear picture of the English nursery school. Its primary objectives are sociological rather than educational.

Training Nursery School Teachers

The first five chapters are devoted to the purpose of the school, the plan of buildings, the garden, diet and clothing. The remaining sixteen chapters of Part I are devoted to descriptions of school routine, programs, and the various types



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of educational activity. Part II, with seventeen chapters, is concerned with the training of nursery school teachers. This course of training includes the various elements considered by Miss McMillan to be essential to the equipment of the nursery teacher. Her training program is intensely practical and quite definitely limited to the technique in the nursery school. The only criticism we would venture is that her course of training does not appear to be either broad or deep enough culturally and professionally to prepare a teacher for this most important position. Several chapters are concerned specifically with the influence of the nursery school upon higher schools. The entire book is a picture of Miss McMillan's school. As a description it is extremely interesting. It does, however, lack objectivity.

"The Preschool Education," by Ilse Forest, Iowa State Teachers College, Cedar Rapids, is a critical historical study of the nursery movement that will undoubtedly become a standard work upon the early phases of the nursery school movement. It was written because of the widespread general interest in this movement. In its critical aspects it attempts to bring together the various viewpoints and elements of early education. It then correlates the contribution of the nursery school movement to the theory and practice of current early education in terms of a democratic philosophy of education. Miss Forest traces historically the changing concepts and social attitudes towards child life. For the benefit of those who have little time to study the more detailed and technical anthropological treatises, the author offers in precise, condensed form the high spots of this gradual evolution from primitive to modern times. The progressive contrast between the old and the new is startling.

History of Movement Is Traced

In her estimate, the beginnings of objective study of child life start with John Amos Comenius and are carried into modern trends by way of Pestalozzi, Froebel, Montessori and John Dewey. Her chapter on the origin of present trends is interesting. She also pictures the modern family and the demands upon it under our social organization. This is followed by a history of the present day nursery school. Her summation regarding the movement and its possible values is best given in her own words: "It appears, then, that the standardization and desirable growth of the nursery school in the United States are dependent largely upon the intelligently cooperative experimental efforts of private and public institutions. Such experiment is needed to determine: (1) the actual values of the nursery school at its best; (2)

the most appropriate methods and techniques for nursery school education; (3) the most desirable type of teacher training for nursery school work; (4) practical ways of making Nos. 1 and 2 available for all or most children."

Josephine C. Foster and Marion L. Mattson, University of Minnesota, have prepared a "practical handbook of nursery school methods" presented under the title of "Nursery School Procedure." According to the authors the phenomenal increase in the number of nursery schools in recent years, not connected with universities or colleges, has resulted in a demand for trained workers far beyond the ability of present training centers to supply. One of the difficulties encountered in training has been the lack of a coordinated literature upon the subject to be used as a basis for classroom work. The purpose of the authors is to present within the compass of a single volume the better practices and techniques. Thus, while the book has been written primarily as a college text, it is so simple, so well organized and so readable that superintendents will find it worth while as an orientation volume.

A Nursery School Program Is Outlined

The first chapter is devoted to a presentation of present day types of nursery schools and their staffs. The status of the nursery child is next considered, followed by a description of the nursery school plant and equipment. Seven chapters are concerned with the program of the nursery school—music and language activities; habits of cleanliness and order; food in the nursery school; sleep in the nursery school; training in social habits and clothing. An excellent chapter on essential records is followed by a discussion of the nursery school and the home, and the nursery school and the kindergarten. The entire treatment is well balanced and dispassionate. The authors are not riding a hobby, but, rather, are presenting the facts they are familiar with through their own experience.

The last two chapters illustrate this point of view excellently. They attempt to show the relationship of the nursery school to the home and take the middle ground, indicating its supplementary rather than its displacement character such as is found in the Russian concept. They also point out the values that may accrue to parents through contacts with the school. In their final chapter they do not advocate immediate adoption of the nursery program by the public school. Instead, they point out the present administrative and financial problems that make it immediately impossible. They recognize clearly the experimental position of the problem. They also

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Steel Adjustable Desk and Chair, Pedestal type, No. 104—Where fixed desks (permanently placed) are preferred or best suited to the work, this popular adjustable type meets all principles of correct sizing and posture.

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Good posture promotes good health. Correct seating is essential to good posture. Research and investigation by specialists in seating posture and schoolroom practice have fixed certain principles governing posture.

School seating should be—can be—constructed and proportioned in accord with accepted posture principles. "American" steel school seats are so built.

The facts are available. Investigate. Become informed that you may distinguish between seating truths and selling propaganda.



Have you any seating in your school like this? Can a child make real progress or love his work under such conditions? Circulation retarded, eyes strained, all principles of health and hygiene violated—is it economy to use such seating? This is a photograph of a school in a prosperous community.



Universal Desk No. 134—Two boys of the same age, in the same class. A few movements of an adjustment wrench, and both were seated comfortably and without danger of developing incorrect posture habit. Such furniture contributes to school efficiency.

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FREE—Any or all of the following pamphlets available to school officials and teachers interested in posture and seating. They constitute conclusions reached by a seating authority, Dr. Henry Eastman Bennett, following exhaustive research and study.

- 1—Seating Equipment for High Schools.
- 2—Seating Arrangements in the Classroom.
- 3—School Seats Too High.



- 4—Why Tables and Chairs in the Classroom.
- 5—Uses and Limitations of Movable School Seating.
- 6—The Buying of School Equipment.
- 7—A Study in School Posture and Seating.
- 8—Hygiene of the Seat Back.
- 9—School Posture in Relation to Visceral Organs.

- 10—Scoliosis and School Seating—A Study in Arm Rests.
- 11—Left Handedness.
- 12—For the Comfort of the Crippled Child.
- 13—The Height of Kindergarten Chairs.
- 14—Grade Distribution of School Desk Sizes.
- 15—Tablet Arm Chairs—Their Use and Abuse.

take pains to show the necessity for careful experimentation, particularly along lines of a practical administrative procedure. "Nursery School Procedure" is an excellent book. Along with Ilse Forest's effort, it will form the nucleus for an administrative library in this field.

"Child Care and Training" by Marion L. Faegre and John E. Anderson, University of Minnesota, is a sound presentation of the entire problem of child training. It is neither sentimental nor mawkish. It is a good rational treatment of the subject. Designed primarily for parents, it is a worth while book to be placed in the library of every elementary school for study by principal and teachers. Although the authors' approach is distinctly objective, yet they have succeeded in presenting this subject in a nontechnical and interesting manner.

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These Students Have One Aim—to Be Good Teachers

Eighty young men, or one-seventh of all the students at Maryland State Teachers College, Towson, are at present engaged in the business of learning how to be elementary school teachers. These young men, when they have completed their course, are in every way prepared to master the science of education and the art of classroom teaching for the elementary school child, an editorial in the *Journal of Education* says.

Nine years ago seventeen young men entered the school with the avowed purpose of being teachers in elementary schools. That number has now increased sevenfold, one reason for the increase being the immediate appointment of the young men graduates to service they enjoy, in which they are interested and which satisfies their aspiration for a useful life, the editorial continues. It concludes with these words:

"These young men have no illusions about being great. They want to make a good living. They want to help in the making of men and women who are good and good for something. They welcome responsibility for a service that needs them and for which they want to be adequately prepared. They have no weak ambition to make teaching a stepping stone to fame and fortune."

The University of Chicago's New President Outlines His Plans

Policies that Robert Maynard Hutchins, newly inaugurated president of the University of Chicago, plans to put into effect at the university were outlined by him in his inaugural address as follows:

1. Increase of professorial salaries.
2. Radical reforms in the methods of the school's undergraduate colleges to the end that the specially gifted student shall not be held back by the mediocrities.
3. Increase of student fees in some departments of the university, so that the student shall make a larger contribution toward the cost of his education.
4. The widening of experimental work and research and the intensification of "the trying out of ideas."
5. Closer cooperation of the university's experts on such problems as "the problem of the family, a problem that will involve the cooperation of eleven departments of the university, from art to chemistry, and of seven of its professional schools, from divinity to medicine.
6. Changes in the instructional methods of the divinity, law and medical schools.
7. Devising the best methods of preparing men and women for research and creative scholarship on the one hand, and for teaching on the other.

A short time prior to his inauguration, President Hutchins in an interview with James O'Donnell Bennett of the *Chicago Tribune* summed up certain weaknesses of present day education in America. He pointed out that the best minds in America have been drawn into business and that, therefore, American universities face a new problem in competition—competition with big business for the best men.

American universities, he said, have allowed undergraduate education to fall far behind elementary and professional education in methods and in developments. It is the great problem that has not had the concerted attack. Return to the dormitory system means the development of a satisfactory university life.

To bring about the new era in education, according to President Hutchins, will mean establishing three or five leader universities—eastern, western, central and perhaps northern and southern—to set the pace for the rest. To do this will require the services of the best instructors over the country. To maintain professorial excellence is the University of Chicago's first task, he emphasized, which can be done only by making the educator's financial position more secure.



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is evidence that school superintendents are planning to get the most out of their equipment in service and length of usefulness.

These pure, inorganic, greaseless cleaners clean so thoroughly and rinse so freely, and are so harmless to use that school plants and equipment are always clean and wholesomely sanitary.

It leaves the natural surface unharmed and uninjured in the slightest degree.



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APPROPRIATIONS & CREDITS				DEBITS				NET APPROPRIATE			
DATE	MEMO	AMOUNT	DEBIT	DATE	MEMO	AMOUNT	DEBIT	DATE	MEMO	AMOUNT	DEBIT
July 1	Budget	18500 00									
Aug 25	BA 1900-99	1000									

FUND <u>Maintenance</u>											
ACTIVITY <u>Instruction</u> <u>Senior High Day</u>											
SUB ACTIVITY <u>Supplies</u> <u>12-6120-000</u>											

ENCUMBRANCES				PAYMENTS				CASH BALANCE			
DATE	REF	AMOUNT		DATE	REF	MEMO	PAYROLL AMOUNT	DATE	CASH BALANCE	AVAILABLE BALANCE	
				July 15	458	Invoice	8000 00	July 15	10500 00	10500 00	
July 16	WTP	1000 00						July 16	10500 00	9500 00	
18	CSP	500 00						July 18	10500 00	9000 00	
				Aug 25	459	Invoices	1200 00	Aug 25	9500 00	7800 00	
Aug 27	NOW	2750 00						Aug 27	10500 00	5050 00	
				Sept 1	484	Invoices	3000 00	Sept 1	8550 00	2050 00	

Diagram 2, a sheet from the appropriation ledger, shows both the available budget balance and the cash balance.

The standards of distribution are gone through successively, and requests are transferred to the column on the card marked "SD." When this has been completed the total quantity demand of any one item is known. The next step is to ascertain the inventory of that item. This may be taken immediately from the general stock room running inventory blank or, if the goods are in the various stock rooms, from their individual blanks, all of which are filled on visible cards. These items may be placed in the proper row in the "In" column. The difference of the column "SD" and "In" is the "Net" need column of that particular item for the department specified. The total of this is placed at the top of the card under the word, "Needed." This is to be done for every individual item in the entire list of distribution standards. Each color of a paint refill is listed on separate cards. The reason for this is that it may be necessary later to look up a specific item by color and to follow the transaction through. In a large system there will be many more of these cards than in a small system, especially if the board of education furnishes all essential supplies.

When the tabulations have been completed, the next step is to make bid sheets. This is facilitated by the fact that tabulations were made on individual cards. These cards may now be arranged in alphabetical order by types. For instance, all paper may be collected in one list, all hardware in another, all artists material in another and all scientific supplies in still another. The final bid lists, therefore, will be fairly homogeneous. This, of course, enables the bidding firm to expedite its work. When the bid sheets are made up, the complete specifications for each item will have to be copied from the tabulated card so that the vendor will know exactly what is needed. Unless this is done, the bidding system will become value-

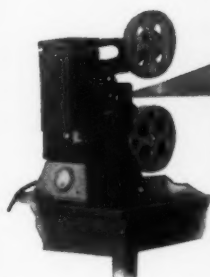
less. Goods for educational work cannot be purchased entirely on "low cash" outlay. Educational quality must be taken into account.

By way of digression, it may be stated that prior to making up the standards of distribution, samples of all types of educational supplies have been requested from various vendors. These, being received by the purchasing department, are listed on a sample test sheet and forwarded to the department in question for test in service. The results, listed on the sample test sheet and returned to the purchasing department, inform the department as to the educational value of these supplies. The test sheet has also assisted the department of instruction in determining quality on its standards of distribution. Frequently several makes will be listed as satisfactory, although it is expected that objective qualities will be listed whenever possible.

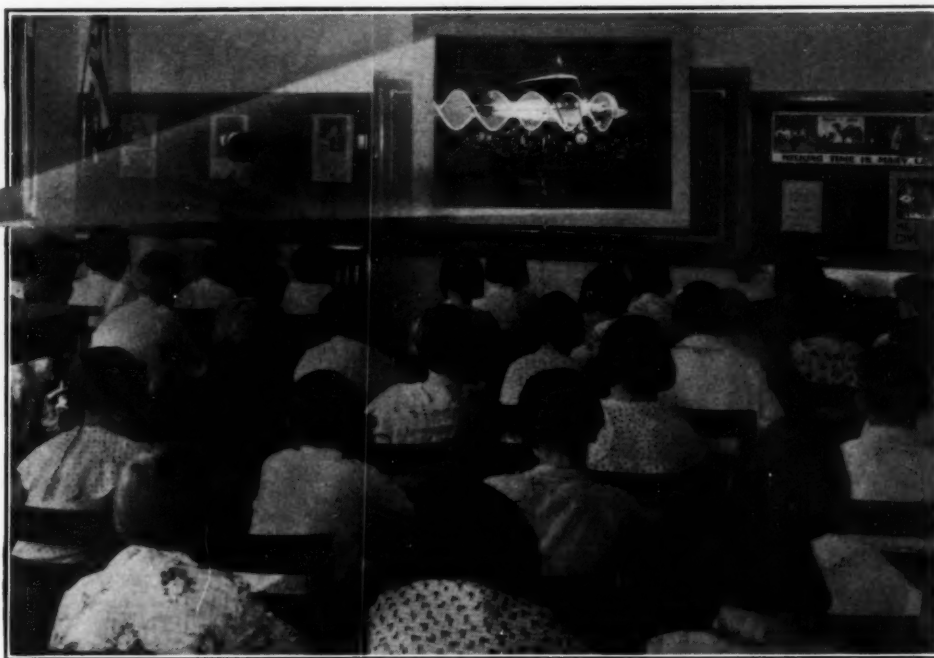
Conducting the Transaction

When long bids are requested, a bid sheet is attached to a mimeographed alphabetical list of supplies. Each bid sheet is to be signed by the vendor, and terms are to be stated. Since these sheets are mimeographed the process of tabulation is easy. They may be laid alongside of each other and the lines synchronized. Because objective specifications have been given, the prices will be nearly alike. If a wide variation is suspected, the placing of the bid sheets beside each other will reveal it instantly. If a wide variation is shown, it is likely that the vendor in question has changed the specifications. There are school systems that secure at least three bids for every purchase. Sometimes as many as twenty-five may be received from various sections of the country. In this way the entire market situation is brought to light.

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Formerly there was no adequate way to explain these principles

The principles employed in simple machines are extremely important. They are extremely simple, too, when understood. But until very recently the teacher had no means of explaining them adequately, vividly. They are only a small part of a single subject that can, at best, be given only a small part of the school day. And, they involve *motion*—an element difficult to convey with the spoken or printed word.

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Now when the science hour begins, the teacher can simply step up to a de-

vice and snap a switch. Immediately the subject leaps to life on a silvered screen, in motion pictures. In fifteen minutes the children *see* more than they could *read* in fifteen hours. A lesson that would otherwise be simply *words* becomes *reality*—an instructive, personal experience linked to everyday life.

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Simple Machines is only one of the many Eastman Classroom Films covering important topics in *General Science, Geography, Health and Civics*.

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Any teacher can show them with the aid of a simple, efficient Eastman projector and screen. Any class can derive from them the important advantages demonstrated by the Eastman educational experiment of 1928.

Send for this list

If you are not familiar with the scope of these films, clip and mail the attached coupon for "A Descriptive List of Eastman Classroom Films." Eastman Teaching Films, Inc., Subsidiary of Eastman Kodak Company, Rochester, N. Y.

GENTLEMEN:

Without any obligation on my part, please send me "A Descriptive List of Eastman Classroom Films."

Name.....

St. & No.....

City & State.....



The rollable School Screen, constructed like a window shade

After the bids are received a careful tabulation is made. The selection of a vendor is made for the item in question, the bid price is placed on the item tabulation card and the bid number and a complete report are forwarded to the board with a recommendation to purchase. In this way the board of education is informed of each step in the process. The board gives its legal consent to the proposed purchase and places this consent, together with the bid prices, in its official minutes. Thus no person is liable to criticism. Every part of the transaction has been conducted openly and the best possible price has been secured.

How Purchase Orders Are Issued

Following approval by the board of education, standard purchase orders are issued and the proper entry made on the item tabulation card. It is now possible to trace any particular item from the standards of distribution through to the purchase order. Sometimes it happens that there are no bids on a particular item. A steel tab at the top of the card shows this condition immediately. No request, therefore, can long go unheeded. Purchase orders are issued for the entire amount for the school year. All goods, with the exception of special pieces of equipment, are delivered to the central stock room.

Each principal has received in the meantime a copy of the standards of distribution. He has also received a copy of the budget and a report from the child accounting department setting forth the probable November membership of the fiscal year. By May 15 preceding the beginning of the fiscal year, which is usually July 1, requisitions have been received for all goods needed for the first semester and sometimes for both semesters. These are checked against the standards of distribution. The unit price is entered on the original, an entry is made in the encumbrance column of the appropriation ledger and the requisitions are forwarded to the stock room.

Two controls are thus at hand. The first is the bidding price, which has been checked against the budget price on the tabulation. If this price exceeds the budget price, there may be some danger of an overdraft in that account and, hence, the need of the encumbrance column. A copy of the appropriation ledger is shown in Diagram 2. Both the available budget balance and the cash balance are constantly known.

Equipment is requisitioned in much the same way, except that the principal is held responsible to check the inventory again and to be sure that the amount listed in the budget was correct. The same is true for textbooks. The entries on the encumbrance column always tell how these specific accounts stand.

The part of the school expenditures that cannot be accurately foretold is the amount expended for maintenance. One does not always know when a window pane is going to be broken, or its size. Hence, it may be desirable to purchase these supplies from month to month. The encumbrance column is of especial value in this connection in that it shows daily how the fund is being depleted. Likewise, the column becomes of particular value in following through the expense for both domestic science and the public lunches.


After the original requisition has been forwarded to the stock room for satisfaction, the duplicate is signed and is filed numerically for reference. The information on this blank is transmitted to the general running inventory in the central stock room.

Every month a complete digest of the various appropriations indicating how they have been expended is sent to the board of education. Correlated with this is a report of the achievement of the schools during that month. Thus it may be seen that the financial department of the public schools is merely a complement to the instructional department. The schools exist for the instruction of the individual child. All departments contribute to this process. At the end of the year, it is to be assumed that all the money appropriated has been spent, or nearly so. If it has not been spent, the budget was inaccurately prognosticated. Money is raised to secure instructional efficiency and individual achievement. It is spent for the same purpose, and the final criterion of appraisal must be the instructional efficiency achieved.

Suggestions for Raising Funds for the School

Ways of raising funds for the school not covered by the city or county school budget are here set forth as having been successfully tried by W. N. Hurley, principal, Central High School, Manquin, Va., according to the *Virginia Journal of Education*.

Plays; variety programs; mock programs, such as mock trials, old-time schools and faculty take-offs; carnivals, especially at Halloween; suppers; popularity contests; advertising schemes, such as selling advertising space on stage curtains and dramatizing mercantile firms; sales campaigns. One way to obtain books for the library is to select the anniversary of a famous literary character's birth and plan a program around his life and works. To all patrons of the school it may be announced that a shower of books is desired.



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ADAPTABILITY TO ALL VOLTAGES AND DISTANCES: The Victor can be used anywhere. Provision is made for attaching to direct or alternating currents, 105 to 250 volts. Interchangeable lenses provide for distances of 10 feet to 70 feet from screen.

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In practically any kind of presentation, the medium of expression is all important, and it is, to a large extent, the thing that governs the final result.

Can you imagine Paderewski sitting at a "tin pan" piano, or Heifitz drawing his bow on a ten dollar fiddle?

It is obvious that the fullest range of possibilities and benefits may be realized from the regular use of motion studies only when the films are projected with an instrument that insures full adaptability and flawless performance *plus* the utmost ease of operation. It is for this reason that—

None but the Victor Master Projector can fully and unconditionally qualify for the severe and diversified service of a School Projector, for—

Only Victor provides: *perpetual steadiness; superior illumination* with smooth, flickerless pictures of exceptional depth and brilliance; *variable speeds; reverse and stop action; freedom from film damage*, and a host of other exclusive advantages.

Full appreciation of the Victor's incomparable performance, however, demands comparison, and an actual demonstration. Write today for detailed information and let us arrange for you to see the Victor in operation as an instrument of higher education.

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News of the Month

Home Economics Conference Is Announced

The third National Conference of Supervisors and Teachers of Home Economics will be held Monday and Tuesday, February 24 and 25, at the Chelsea Hotel, Atlantic City, in conjunction with the meeting of the Department of Superintendence of the National Education Association which convenes February 22.

The Monday afternoon session will be devoted to research, and Helen Goodspeed, special assistant to the director of home making, Philadelphia, will preside. The conference has been fortunate in securing Dr. Elizabeth L. Woods, director of the department of educational research, Los Angeles, to discuss "Research and Service in Nursery Schools." Dr. L. Thomas Hopkins, formerly professor of education at the University of Colorado and now at the Lincoln School, Teachers College, Columbia University, will discuss "The Function of Research in Curriculum Reorganization." Dr. Annie R. Dyer will report researches in present practices and Emeline S. Whitcomb, specialist in home economics, Office of Education, Department of the Interior, Washington, D. C., will report researches concerning criteria for building home economics curricula.

A banquet will be held Monday evening at which Dean William F. Russell, Teachers College, Columbia University, will deliver an address.

Tuesday afternoon the theme is "The Rôle of the School in the Health Education of the Child." Alice R. Wallin, head of the department of child care, Highland Park High School, Highland Park, Mich., will preside. The main speaker is Dr. H. E. Barnard, director of the White House Conference on Child Health and Protection. The subject will be discussed by Carleton Washburne, superintendent of schools, Winnetka, Ill., and by classroom teachers including Miss More, Lucy Flower High School, Chicago; Miss Daly, Paterson, N. J.; Miss Bullard, Buffalo, N. Y.; Miss Fish, William Penn High School, Philadelphia; Miss Keene, Detroit, and Dr. Ruth Andrus, Albany, N. Y., a state director of child welfare.

On Wednesday afternoon there will be an opportunity for supervisors and classroom teachers to participate in round table discussions. The organization of those round tables is under the direction of Sadie Swenson, Springfield, Mass.

Specialist in Negro Education Is Appointed

The Secretary of the Interior, Ray Lyman Wilbur, has appointed as a "specialist in Negro education," in the Office of Education, James A. Bond, dean, Kentucky Normal and Industrial Institute, to assist in the survey being made of secondary education.

Dean Bond will confine himself particularly to the educational activities in behalf of his race and will be attached to the Office of Education. He will be temporarily stationed in Cincinnati, but later will serve in Washington. His work will be a part of the survey of secondary education that is being made by the Office of Education under an authorization by Congress, and will have to do particularly with those phases of it relating to the Negro race.

Dean Bond is thirty-eight years old and has been engaged in educational activities in behalf of his race for fifteen years. He served for three years as principal of a high school at Middlesboro, Ky., three years as instructor of English in Swift College, Rogersville, Tenn.; two years as dean of Seldens Institute, Brunswick, Ga.; three years as head of the education department, State College, Frankfort, Ky.; three years as dean of that college and one year as its acting president.

Reading Habits of Children to Be Studied at Chicago

The School of Education of the University of Chicago, in cooperation with the Chicago Board of Education, offers a course in which the reading habits of Chicago's school children will be studied and the results of recent researches in the scope and method of child reading will be presented. Five hundred teachers, superintendents and principals in Chicago's elementary schools have enrolled in this course.

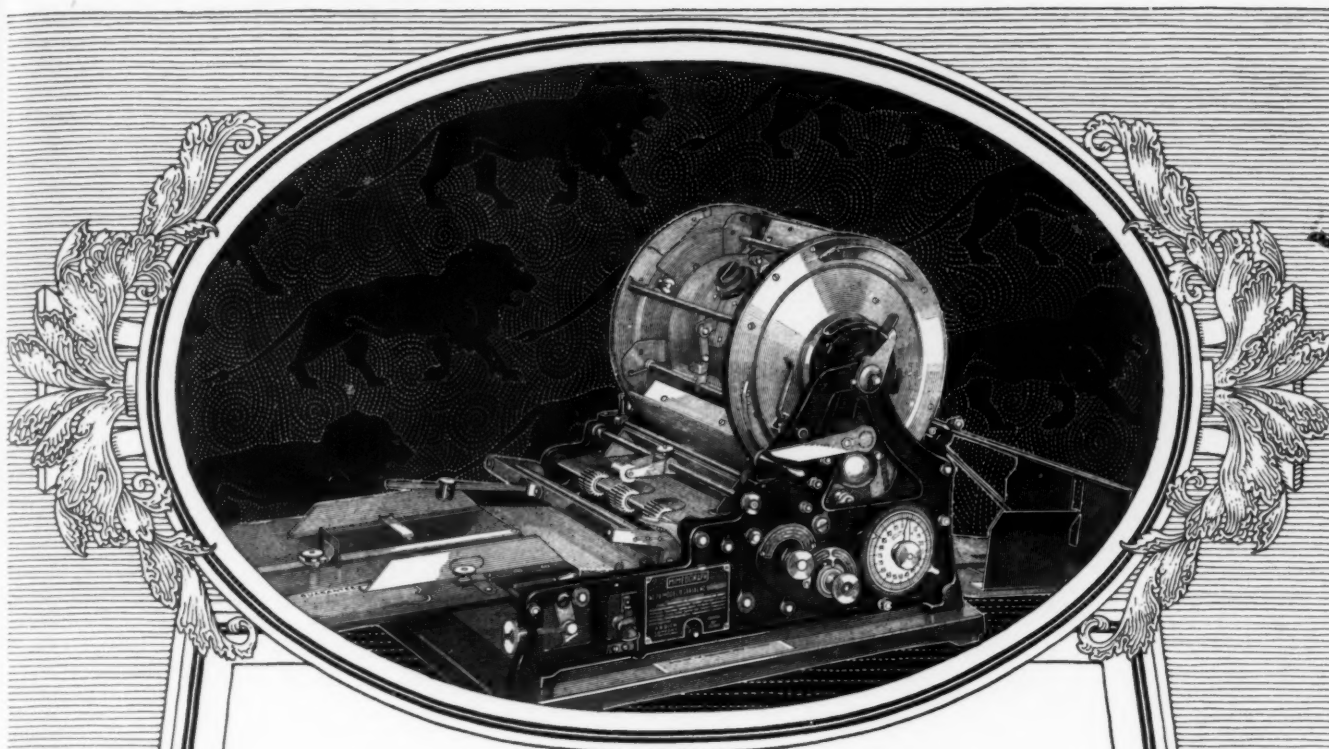
Pupil Musicians to Play Before Superintendents

A high school orchestra of 300 players will appear on the program of the Department of Superintendence of the National Education Association at the annual meeting of the department at Atlantic City, N. J., in February, according to an announcement in the *Journal of the National Education Association*.

The players in this orchestra will be chosen from schools in every state in the United States. Membership will be dependent upon ability, only those whose musician-ship is of a high order being selected.

Two hundred members of this orchestra met in Interlochen, Mich., last summer for the rehearsal of the music to be played on the program of the Atlantic City convention, under the direction of Joseph E. Maddy, head of the public school music department of the University of Michigan.

The convention concerts will be followed by concerts in the Metropolitan Opera House, Philadelphia, in Carnegie Hall, New York City, and in the new Constitution Hall, Washington, D. C.



DUPLICATION IN SCHOOLS

"Never before has the Mimeograph and the Mimeograph process been so vital to education as now," says a prominent educator. "More pupils, more detail, more efficient organization—all these mean that executives and teachers alike must have at hand a means of speedily duplicating key ideas." The simple Mimeograph stencil process means instant, accurate duplication, in hourly thousands, of study courses, bulletins, office records, schedules, reports, questionnaires, grade sheets, etc., for school executives. And teachers are finding it indispensable for reproducing supplementary lesson sheets, problem work sheets, instruction sheets, school newspapers, maps, penmanship models and other forms needed in rapidly growing curricular and activities programs. The famous Mimeograph stencil sheets—Mimeotype, and the new Cellotype, produce perfect mimeographing at less cost than ever before. The Mimeograph can be easily operated by anyone after a few minutes' instruction. It insures needed privacy. For full particulars of its growing importance in educational work send today for interesting booklet to A. B. Dick Company, Chicago, or to branch offices in principal cities.

M I M E O G R A P H



News of the Month

School Subjects Are Prominent on Mental Hygiene Program

Schools, education and the relation between teacher and child hold prominent places on the program of the First International Congress on Mental Hygiene, according to an announcement made by administrative headquarters, 370 Seventh Avenue, New York City. The congress is to be held at Washington, D. C., May 5 to 10, 1930. It is expected that educators, psychiatrists, general medical practitioners, psychologists and social workers from many countries will be present. Mr. Hoover has accepted the honorary presidency of the congress.

Among subjects bearing on education listed on the program are: problems presented by children of special type: (1) the child with superior intelligence; (2) the neurotic child; (3) the child with sensory and motor defects; organization of special types of clinical service, as grade and high school clinics, college clinics, clinics in social welfare agencies, in courts and elsewhere; special problems of adolescence; significance of teacher-child and parent-child relationships in character and personality development; value of mental hygiene in the school and classroom: grade school, high school and college; the training of parents and teachers to a more thorough understanding of the child; mental hygiene in personnel work and vocational guidance; the preschool child.

In addition, personal problems of adjustment and a wide range of topics relating to mental hygiene will be discussed. The importance of mental hygiene as a health problem will be canvassed and the part that mental hygiene plays in bringing happier and more efficient relationships into the lives of everybody emphasized. Research in the mental hygiene field, psychiatric social service, treatment of patients in hospitals, mental hygiene aspects of delinquency and many other subjects will be considered.

Among agencies participating in the organization of the congress are the National Education Association, the U. S. Bureau of Education, the American Child Health Association, the National Congress of Parents and Teachers.

Dr. William A. White, psychiatrist of Washington, D. C., is president of the congress and Clifford W. Beers is secretary-general. The administrative secretary, John R. Shillady, will be glad to answer all questions.

Alaska College to Study Aurora

The Rockefeller Foundation has appropriated \$10,000 for establishment of an observatory for the study of the aurora at the Alaska College of Agriculture and School of Mines, at Fairbanks, according to information received by the executive assistant to the Secretary of the Interior.

The Alaska college, which is said to be the most northern college in the world, will receive \$2,500 in 1930 as the first payment toward the \$10,000 fund for the aurora study, Mr. Sawyer was informed. From 1931 to 1933 the college will receive \$1,200 annually, and in 1934 will receive \$3,750.

Any unused money of the appropriation as of December 31, 1935, will revert to the donor organization, Mr. Sawyer was advised.

Reports from the study, which are to start immediately upon arrival of the photographic supplies, will be available for the scientists who are to make a polar flight next April on the dirigible, "Graf Zeppelin," from Fairbanks, the Alaskan base of the flight.

School Enrollment Gains in Tennessee

The number of pupils attending high school in Tennessee increased 121 per cent between 1919 and 1929, the chief clerk of the department of education has announced. In 1919 there were 24,393 attending high school, compared with 53,970 in 1928.

During the same period the attendance in elementary schools of the state had gained only 12.6 per cent, being 374,517 in 1919 as compared with 422,722 in 1928.

During this period of student growth, 5,000 teachers were added to faculties, and the average salary grew from \$403.03 to \$826.61 annually. This was an increase of 30 per cent in teachers and a gain of 105 per cent in salary. The total of 13,097 teachers in 1919 had increased to 17,808 in 1928.

During this period the number of school buildings decreased from 6,834 to 6,197, and the number of elementary schools from 6,494 to 6,026, but these decreases were attributed to consolidations, and are regarded rather as a mark of progress than an indicated decrease.

The value of school property over this period increased to \$31,374,376.50 from \$19,226,235, or a gain of 63 per cent.

International House Opened at University of Oregon

The University of Oregon International House, the third to be established in the United States, opened at the beginning of the Fall term, according to an article in a recent issue of *School and Society*. Russian, Albanian, Filipino, Korean, Danish, Japanese, American, Chinese, Hawaiian, East Indian and French students, all attending the university, are included in the group.

International houses are already established at Columbia University and at the University of California, but these are endowed and are in the form of groups. The International House at the University of Oregon was begun as a spontaneous student movement and has aroused so much interest resulting in material aid that no endowment has been necessary.

No definite social organization will be attempted, no officers will be elected, and the group is selective only on the basis of freedom from racial prejudice and congeniality of the individuals.

Plans are being made for the students in the house to tour the college centers of the Northwest this winter. A program in which each student will present something typical of his country will be given.



DESKS that INSURE **Last Hour** **Comfort**

When pupils must turn in their seats to write comfortably, the body is thrown in a tiring position—the light strikes and tires the eyes, the posture, being wrong, brings weariness. Children let up on “last hour” studies, they get into trouble and worry the teacher.

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News of the Month

Broadcasters Offer Education by Radio

Dr. William John Cooper, commissioner of education, announces that the Secretary of the Interior has received from a national broadcasting company a tentative plan for a series of educational broadcasts to be presented for the school term beginning in February, 1930, and the Office of Education has been asked to offer suggestions in respect to the courses outlined.

Use of the radio in public schools in the country, Doctor Cooper points out, is a matter now under investigation by the advisory committee on education by radio, appointed by the Secretary of the Interior. This experiment is a practical step in the direction of attempting to use the radio as a direct method of education and will be watched with considerable attention by all educators interested in the possibilities of education by radio, he said.

This radio feature will be called "The American School of the Air" and will be broadcast half an hour twice a week on Tuesday and Thursday afternoons at 2:30 to junior high school pupils. On Tuesdays, the teaching and development of American history will be given by means of dramatic episodes relating to the political, economic and social life of the nation. The Thursday half-hours will be reserved for a more diversified program which will include American literature, political science, health and hygiene, American music and nature study.

Laws Enacted for Physical Welfare and Safety of Children

Within the past two years, according to the Office of Education, approximately one-half of the states enacted laws that in some way tend to promote the health and physical safety of school children.

The following laws relating especially to the conservation and promotion of health have been passed: Arizona appointed a state physical director and requires that all public elementary and secondary schools provide physical training. The legislature of Florida provides for the creation of the position of state supervisor of physical and health education. An Idaho act authorizes county superintendents to close school buildings reported by health officers to be in insanitary condition. Illinois requires that school boards provide physical education for one hour each week, that normal schools give physical education courses and that no student shall be graduated without having completed one year's work of 144 forty-five-minute periods in physical education. The Illinois legislature authorizes cities of more than 100,000 population to levy three-twentieths of one mill on each dollar of assessed value of taxable property to maintain playgrounds. Kansas authorizes boards of education in cities of more than 100,000 population to provide free inspection and treatment of physical defects and ailments of public school children who are unable to pay the necessary expense for private treatment. New Jersey made provision

for the employment of school nurses who will examine every pupil to ascertain whether any physical defects exist and keep a record from year to year of the growth and development of pupils. Texas authorized the commissioners' courts of the various counties to employ one or more registered nurses at not more than \$1,800 per annum each to visit the public schools and to investigate the health conditions and sanitary surroundings and the physical condition of pupils. Wyoming enacted a law requiring teachers, with the assistance of county health nurses or county physicians or both, to examine the children to ascertain whether any are suffering from defective sight or hearing or disease of the nose or throat.

Laws to guard the physical safety of school children and to prevent accidents were enacted in a number of states. Arizona, Kansas, Michigan and South Carolina require busses to stop before crossing a railroad track; South Carolina requires fire drills in all public schools and that schools of two or more stories be equipped with adequate fire escapes. Arkansas requires the teaching of methods of fire prevention.

Pupils Pass Tests of 1853 With Flying Colors

That school children of to-day are fully as smart if not smarter than those of seventy-five years ago was proved, says the *Journal of Education*, when 200 selected pupils in the pre-high school grades of Boston recently took the examination for admission to high school given in 1853 and scored 100 per cent.

Only eighteen, or 80 per cent, of the pupils who took the examination in 1853 passed. The pupils of 1929 triumphed in the three R's, thus answering the criticism that present day pupils spend too much time on superfluous fads and frills and neglect the fundamentals of education.

Another interesting fact in connection with this test is that the boys of the present day showed a far higher standing than the girls.

Municipal Management of Schools Is Advocated

Authorities on municipal government would generally favor a movement to abolish boards of education and to place public schools in cities under the management of the municipal department, the chief of the city schools division, W. S. Deffenbaugh, of the Office of Education, says in a statement made public by the Department of the Interior.

Although there has been a tendency to consolidate municipal departments and to abolish departmental heads, no effort has been made to put the city school systems under control of the municipal governing system.

"As long as education is considered a state and not a municipal function," Mr. Deffenbaugh said, "schools will not become more subordinate to municipal government than they now are."

SILENCE *is on the school menu!*



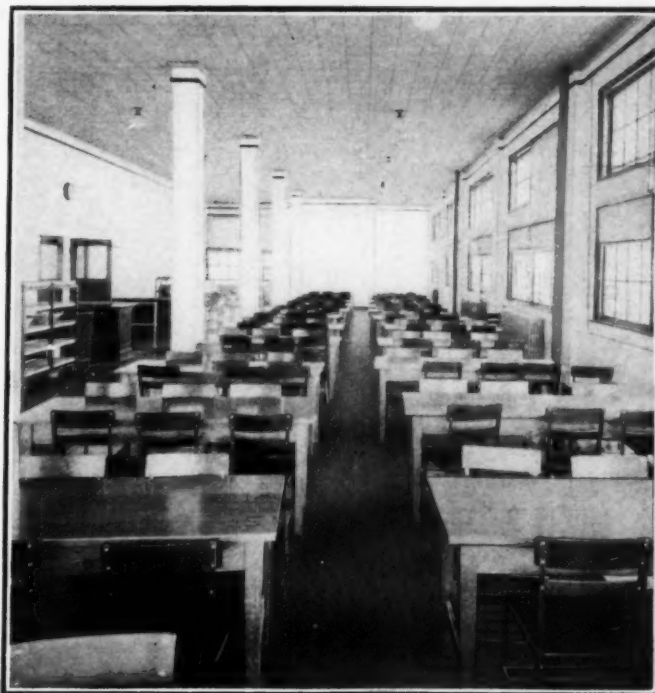
Clamor left the bill o'fare when Armstrong's Linoleum was installed in this Cafeteria . . .

CLASSES out—it's luncheon time! Students scramble for first place in the fast forming line. Youngsters come pelting into the cafeteria, clamoring for food, rattling dishes, yanking out chairs, shoving them in again.

Noisy floor to add to the din? Not in the cheery cafeteria of Denver's Smiley Junior High School. Here, where a quiet floor is needed, Armstrong's Linoleum is underfoot. Yes, chosen because of its sound silencing qualities. This modern floor helps subdue cafeteria noises—it can silence clattering footsteps throughout the school.

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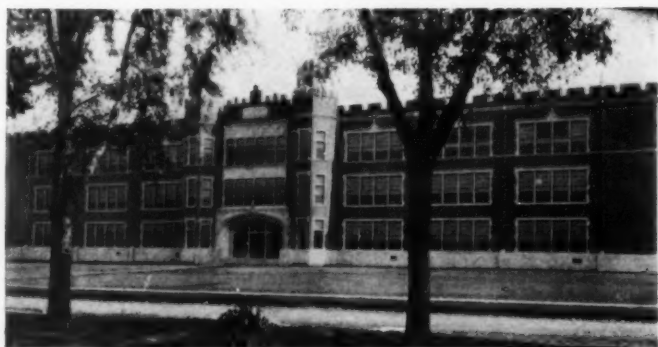
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News of the Month

Office of Education Announces New Divisional Heads

The personnel and final outline of the reorganization of the United States Office of Education were announced at a meeting of the entire staff by the commissioner, Dr. William John Cooper, December 23.

Under the reorganized administration there are six major divisions. These divisions are as follows: (a) the major division on administration; (b) the major division on educational research and investigation; (c) the editorial division; (d) the library division; (e) the service division, and (f) the division of national surveys.

The major division on administration will handle matters affecting administrative routine and is in charge of the chief clerk, L. A. Kalbach. The secretary to the chief clerk is Birdie B. Hill.

Under this division, Doctor Cooper said, six important functions fall as follows: most of the administrative responsibilities formerly discharged by the commissioner; provision for office space, equipment, and supplies; accounting in charge of David E. Thomas, assistant chief clerk and accountant; mails and files in charge of Eunice W. Curtis; clerical and stenographic assistance in charge of A. H. Gibbs, and the Alaska division whose chief is J. H. Wagner, Seattle, and whose resident chief is Dr. William Hamilton.

The major division on educational research and investigation is in charge of the assistant commissioner, Bess Goodykoontz, with a secretary, Mrs. Grace S. Wright. Also there are two consultants in this division: Dr. J. F. Rogers and M. M. Proffitt.

Doctor Cooper called attention to five main sections under this division as follows: the division of collegiate and professional education in charge of Dr. A. J. Klein who will be assisted by three specialists who will give their attention primarily to the subjects indicated; teacher training, Ben W. Frazier; land grant college statistics and student relations and welfare, Walter J. Greenleaf, and graduate and professional education, Walton C. John. The second section of the division of educational research and investigation is entitled American school systems and is in charge of Walter S. Deffenbaugh who in addition will be specialist in administration. He will be assisted by specialists in finance, law, curriculum. School finance will be in charge of Timon Covert; school law, in charge of Ward W. Keesecker; curriculum, kindergarten-primary level, in charge of Dr. Mary Dabney Davis; curriculum, elementary school level, in charge of Mina M. Langvick, and curriculum, secondary school level, in charge of Carl A. Jessen.

The third section of the same division is concerned with research into special problems and is in charge of Mrs. Katharine M. Cook with the following special subsections: problems peculiarly rural, Mrs. Cook; equalization of educational opportunity, Walter H. Gaumnitz; education of indigenous peoples, unassigned education of Negroes, J. A. Bond; and education of the handicapped, Dr. James F. Rogers, general consultant.

The fourth section of the second major division is statistical service which is in charge of Dr. Frank M. Phillips.

Finally, the fifth section is foreign school systems, which is in charge of J. F. Abel with assistants on evaluation of credentials of foreign students, in charge of Frances M. Fernald and Severin K. Turosienski; comparative European education, unassigned; and comparative Oriental education, unassigned.

No assignment of editor has been made in respect to the third major division called the editorial. Dr. Henry R. Evans, who is now acting editor, will be assistant editor. Doctor Cooper explained that the editorial division is responsible for the biennial survey, bulletin series, *School Life*, reporting educational conventions, evaluating educational literature, research for the editing of educational manuscripts prepared outside the Office of Education.

The fourth major division, the library, is in charge of the librarian, unassigned and the assistant librarian, Martha R. McCabe, now acting librarian. This division will be responsible for the library education, statistical and other technical service to librarians, and the organization of school libraries, the latter being in charge of Edith A. Lathrop.

The fifth major division, Doctor Cooper stated, which is the service division, is in charge of L. R. Alderman, and it has eight functions as follows: contacts with the field in general, assistance to other federal departments and promotion in such fields as adult education, all of which Mr. Alderman will handle; promotion in correspondence will be handled by Florence Fox; assistance to committees and commissions of the National Education Association and others, unassigned; home reading courses by Ellen C. Lombard; requests for local surveys composed of members of the various sections of the office and from outside fields; schoolhouse planning by Alice Barrows; education in home-making, Emmeline Whitcomb, and finally, education for business under the direction of J. O. Malott.

Doctor Cooper himself as commissioner will be in charge of the sixth major division which will be concerned with surveys of national scope. Doctor Cooper explained that the commissioner will handle this division personally assisted by part-time experts. At present L. V. Koos, University of Chicago, is serving as such an expert in secondary education.

A bill appropriating \$50,000 for the first year and totaling \$300,000 covering a period of three years for a national survey has already passed the House of Representatives and is now before the Senate.

Extensive Courses in Advertising Offered by Numerous Schools

One hundred and sixty-six colleges and universities in the United States offer one or more courses in advertising, according to a statement made by J. O. Malott, specialist in commercial education of the Office of Education.

There was a total registration of 11,357 students in the 158 institutions that reported their enrollments in advertising. New York University leads, with 2,785; the College of the City of Detroit ranks second, with 586; and Northwestern University, Chicago, third, with 535.

It has the greatest *Usable* range of adjustment



UNIT MOVABLE DESK SET

EVERY fraction of an inch of adjustability on this modern desk set is practical and usable. The range on the desk sizes is from 20 inches (which suits the very lowest grades) to 30 inches (which will accommodate adults). The adjustment range on the chair accurately corresponds to that of the desk, thus assuring maximum usability. . . . Then, too, the adjustment range on each *size* of the Unit Movable generously overlaps the size above or below it and, consequently, permits a leeway of one or more grades. This flexibility of adjustment makes it easy to correctly seat any pupil and permits the use of one size desk in many more grades than the average desk set. . . . Before deciding on your school seating, get *all the facts on adjustment*, as well as construction, adaptability, and usefulness. Ask your nearest Heywood-Wakefield sales office to explain to you in detail about the advantages of our new Unit Movable and many other modern, practical school desks which we manufacture.



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HEYWOOD-WAKEFIELD

MAKERS OF PRACTICAL SCHOOL SEATING

News of the Month

Secondary Schools Show Large Increase

During the period 1918 to 1926, the total population of the United States increased somewhat less than 15,000,000, not quite a 14 per cent growth, according to estimates of the Bureau of the Census. During the same time the number of high schools increased 5,400, a 33 per cent increase. The teaching force in these schools practically doubled. The number of pupils, too, came within a hundred thousand of doubling during the eight-year period. Costs increased more than 300 per cent.

At the present time more than one-half of our population of ages fifteen to eighteen, inclusive, is actually enrolled in secondary schools. In 1918 the percentage was 28.29; in 1920, 37.80; in 1922, 41.74; in 1924, 48.35, and in 1926, 53.12. The corresponding percentages for enrollments in public high schools range from 25.6 in 1918 to 48.2 in 1926.

The number of schools in 1918 was 16,300, in 1926, 21,700; the number of teachers in 1918 was 84,988, in 1926, 169,538; the number of pupils in 1918 was 1,933,821, while that in 1926 was 3,757,466. Cost of secondary education in 1918 amounted to \$162,875,761 compared with \$697,911,735 in 1926.

New York Chinese Buy Schoolhouse

On Mott Street, the Main Street of New York's Chinatown, Public School 108 is being rapidly transformed into a free Chinese public school, purchased and supported by Chinese money, where Chinese is taught to Chinese and where American born Chinese youngsters are to be taught the machinery, ideas and ideals of the new Chinese government and all the varied lore, culture and history of old China.

The Chinese Consolidated Benevolent Association which is connected with but independent of the Nanking government has raised the \$95,000 necessary for the purchase of the building and the \$30,000 necessary for its renovation. Between 300 and 500 boys and girls will attend the school at night after their regular day sessions in the New York City public schools, according to a recent article in the *Journal of Education*.

Ohio Holds Its Tenth Annual State Educational Conference

"Reaching the Individual" will be the keynote of the Tenth Annual Ohio State Educational Conference to be held in Columbus, April 3, 4 and 5, 1930. Robert M. Hutchins, president of the University of Chicago, will speak at the general session, and E. H. Southern, well known actor and dramatic reader, will give a series of readings from Shakespeare at an evening session.

More than one hundred speakers, including thirty-five from out of the state, will participate in the conference, at which a registration of more than five thousand is expected. Last year 5,100 were registered.

Sectional meetings will be held to discuss visual education, bringing the number of sections to thirty-five.

One or more meetings will be held by groups interested in each of the following subjects: adult education, attendance supervisors, school nurses and visiting teachers, biological science, city superintendents, clinical psychology, commercial education, county superintendents, educational and intelligence tests, elementary principals, elementary teachers, English, geography, higher education, high school principals, history, home economics, industrial and vocational education, journalism, junior high school principals, kindergarten and primary teachers, Latin, mathematics, modern language, music, nonbiologic science, parent-teacher associations, physical education, religious education, school business officials, school librarians, special education, teacher training, village and consolidated school superintendents and visual education.

Educators Invited to Attend Conference in Spain

The government of the United States has been invited, through the ambassador of Spain, to send representatives to the third international congress of Hispanic-American history and geography, to be held at Seville, Spain, May, 1930, the specialist in foreign education, J. F. Abel, stated recently.

Historians and geographers of all countries, academies, universities, and scientific bodies are also invited to send representatives to the congress, which is held under the patronage of the king of Spain, to consider the scientific problems of the history and geography of Spain and America.

General sections of the program of the congress will include the following subjects: pre-Columbian history; history of the discovery and conquest of America; colonization; and Hispanic-American touring activities.

Fund to Aid in Advancement of Musicology

Honoring its late secretary and historian, Oscar G. Sonneck, the Beethoven Association of New York City has presented to the Library of Congress a "Sonneck Memorial Fund" of \$10,000, to be used in the advancement of musicology.

The presentation of the check was made by Harold Bauer, president of the Beethoven Association, to Dr. Herbert Patnam, librarian of congress, on October 6, the birthday of Mr. Sonneck, who died in New York City on October 30, 1928, at the age of fifty-five.

The fund, like all similar donations, will be administered by the Library of Congress trust fund board, of which Secretary of the Treasury Andrew W. Mellon, is chairman. The income from the fund will be devoted to the aid and advancement of musicology by offering, through the music division in the library, annual prizes or stipends for original contributions to musical research and scholarship in the historical, esthetic or critical field.



FROM THE DOCTOR'S VIEWPOINT

THE physician thinks of school furniture in terms of growing bones and tissues . . of precious eyesight that must be guarded. Does the seat support the growing spine and lumbar regions? .. Does the desk adjust to the proper height so that the body, arms, legs and feet are comfortable?.. Is the finish in soft colors, soothing to the eyes? Yes, yes and yes .. if it's Kundtz Eclipse Equipment.

The Theodor Kundtz Company
CHURCH AND **ECLIPSE** AUDITORIUM SEATING
SCHOOL FURNITURE
Cleveland Ohio, U.S.A.

News of the Month

Progress Being Made in Survey of Secondary Education

The nationwide survey of secondary education, for which Congress authorized an appropriation of \$225,000 and appropriated the first installment of \$50,000 for the fiscal year 1930, is proceeding steadily under the direction of the commissioner of education. Dr. L. V. Koos, University of Chicago, has been appointed as an expert assistant to give his full time and attention to the work shortly after the first of the year. The consulting committee of nine experts appointed last October has met and has organized and defined the field of work to be covered by the survey.

The Secretary of the Interior has now selected a group of advisers consisting of about thirty educators to assist the survey staff in combing the nation for information. In the near future, a second group consisting entirely of laymen will be chosen. To this group will be presented the work of the survey commission as it proceeds, and they will criticize it from the point of view of the average citizen. Both the educators and the laymen will review the final reports.

The personnel of the advisory group represents all sections in the United States, as well as a large variety of educational interests. In it are specialists in state school administration, city school administration, state university administration, relations of colleges and secondary schools, relations of elementary and secondary schools, Negro education, the junior high school, the senior high school, the junior college, the large city high school, the small high school, high school libraries, the curriculum, extra-curriculum activities, school counseling and guidance and vocational education.

The following persons constitute the advisory group: E. J. Ashbaugh, dean, School of Education, Miami University, Oxford, Ohio; John L. Clifton, state director of education, Columbus, Ohio; R. L. Cooley, director, Milwaukee Vocational School, Milwaukee; Philip W. L. Cox, professor of secondary education, New York University; Jesse B. Davis, professor of secondary education, Boston University; J. D. Elliff, High School Visitor, University of Missouri, Columbia; Lucile Fargo, 1273 Carlyon Road, East Cleveland, Ohio; E. N. Ferriss, professor of secondary education, Cornell University, Ithaca, N. Y.; Will C. French, associate superintendent of schools, Tulsa, Okla.; John M. Gandy, president, Virginia Normal and Industrial Institute, Petersburg, Va.; T. W. Gosling, superintendent of schools, Akron, Ohio; Arthur Gould, assistant superintendent of schools, Los Angeles; E. D. Grizzell, professor of secondary education, University of Pennsylvania; W. W. Haggard, superintendent, Joliet Township H. S. and Junior College, Joliet, Ill.; W. A. Jessup, president, University of Iowa, Iowa City; Franklin W. Johnson, president, Colby College, Waterville, Me.; J. Stevens Kadesch, head master, Medford High School, Medford, Mass.; Frank M. Leavitt, associate superintendent of schools, Pittsburgh; Michael H. Lucey, principal, Julia Richman High School, New York City; A. Laura McGregor, vice-principal, Washington Junior H. S., Rochester, N. Y.; C. R. Maxwell, dean, School of Education, University of Wyoming, Laramie; Bruce Millikin, principal, East High

School, Salt Lake City, Utah; Shelton Phelps, director of instruction, George Peabody College for Teachers, Nashville, Tenn.; E. Ruth Pyrtle, Bancroft High School, Lincoln, Nebr.; Lewis W. Smith, superintendent of schools, Berkeley, Calif.; W. R. Smithey, professor of secondary education, University of Virginia; Sarah M. Sturtevant, associate professor of education, Teachers College, Columbia University; Milo H. Stuart, principal, Arsenal Technical High School, Indianapolis; W. L. Uhl, dean, College of Education, University of Washington, Seattle; William A. Wetzel, principal, Senior High School, Trenton, New Jersey.

Educational Officials Call Conference on Home Economics

A conference on home economics in American education called by the United States Commissioner of Education, Dr. William John Cooper, convened at the U. S. Department of the Interior on December 6. The conference dealt particularly with the "place and function of home economics in American education."

Doctor Cooper, acting as general chairman of the conference, delivered an address on the unrealized opportunities of home making education. Other addresses included those on the outstanding problems confronting home economics in the schools by Prof. F. E. Bonser, Teachers College, Columbia University, and on conditions determining the characteristics of home economics courses in college entrance credits, by Margaret Justin, president of the Home Economics Association and dean of the division of home economics, Kansas State Agricultural College. Ruth Wheeler, Vassar College; Michael H. Lucy, principal of Julia Richman High School, New York City, and W. A. Jessup, president of the University of Iowa also contributed to the program.

The conference was attended by presidents of universities, deans of educational schools, professors of education, state and city superintendents, principals of high schools, deans, directors, teachers of home economics and other educators.

Rhodes Scholars for 1930 Announced

The names of thirty-two men, six of them from Annapolis and two from West Point, who were successful in the Rhodes scholarship examinations conducted recently in thirty-two states, were announced recently by Dr. Frank Aydelotte, president of Swarthmore College, Swarthmore, Pa., and American secretary of the Rhodes trustees.

The new scholars will begin their studies at the University of Oxford next October. This study abroad is made possible by the will of the late Cecil Rhodes, which designated an annual sum of \$2,000 for three years for each scholar.

According to *School and Society*, the Naval Academy, entering the contest for the first time, offered seventeen candidates, while the Military Academy was the only other institution having more than one candidate accepted. There were 367 applicants.



Maywood High School, Maywood, Ill.

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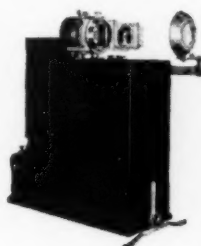
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In the Educational Field

PROF. ALBERT A. MICHELSON has resigned as head of the department of physics of the University of Chicago, his resignation to be effective at the end of the academic year. PROFESSOR MICHELSON will devote his time to his studies on measuring the velocity of light.

DR. GRACE LANDRUM of William and Mary College, Williamsburg, Va., was recently elected president of the Virginia Council of Administrative Women in Education.

DR. CARRIE W. SMITH, of the New Jersey State Department of Health, has been appointed superintendent of the Montrose School for Girls, Reisterstown, Md.

ROBERT E. DOWNS, director of education, assistant to EDWARD J. TOBIN, superintendent, Cook County, Illinois, will retire from educational life and open a law office in Chicago.

W. E. LANTZ, former superintendent at Blissfield, Ohio, is now head of the schools of Redford Union, just outside of Detroit.

J. H. MULLENIX heads the newly consolidated district in Warren Township, Jefferson County, Ohio, including the schools at Tiltonville, Rayland, Warrenton, Connorville and Glen Robbins.

JAMES D. TOOLE, Minersville, Pa., was recently made assistant county superintendent of Schuylkill County, to succeed the late MARTIN E. FOYLE.

NELSON P. BENSON, for the last nine years superintendent of schools, Lock Haven, Pa., died recently at the age of fifty-one years.

T. H. PEASE, former superintendent of schools, Clinton, Ill., has accepted the school superintendency at Summit, Ill.

P. N. ATWOOD, superintendent of schools, Staples, Minn., was elected president of the Central Minnesota Education Association at the annual meeting.

PROF. PITIRIM SOROKIN, for six years with the department of sociology at the University of Minnesota, has accepted the chairmanship of the department of sociology at Harvard University. Before coming to America, PROFESSOR SOROKIN was head of the department of sociology at the University of St. Petersburg. He has published many books and papers dealing with social problems.

DR. ALAN M. CHESNEY has been appointed dean of the medical school of Johns Hopkins University to succeed DR. LEWIS H. WEED, who will devote his entire time to the teaching of anatomy.

ORVILLE WRIGHT will dedicate the new Wilbur Wright Junior High School, Cleveland, Ohio, named in honor of his brother.

ROY G. FALES was recently appointed supervisor of industrial arts in the vocational and extension education division of the New York State Education Department. The position was formerly held by GEORGE E. HUTCHERSON, who is now supervisor of guidance.

Outside Aid Given Schools Amounts to Millions

Chief among the separate and individual boards that have dispensed millions of dollars in the last few years to promote education in the United States are the Laura Spelman Rockefeller Memorial, which before its consolidation this year with the Rockefeller Foundation had dispensed \$38,082,058; the Rockefeller Foundation, which gave \$4,097,343 for medical education alone in 1927, and the Carnegie Corporation of New York, which spent \$2,041,250. Other boards are the General Education Board, the Carnegie Foundation for the Advancement of Teaching, the John F. Slater Fund, the Jeanes Fund for the improvement of rural schools for Negroes, the Phelps-Stokes Fund and the Kahn Foundation for the Foreign Travel of American Teachers.

List of Educational Journals Compiled

A record of the current educational publications comprising all publications of that character received by the United States Office of Education for the year 1928 has just been published by the Government Printing Office and is available to investigators in the field of education, the acting librarian, Martha R. McCabe, stated recently.

Because of a delay in its publication, Miss McCabe said, news of its availability will be of interest to librarians following studies in the field of education.

A complete author and subject index to the 1,610 entries in the record are included at the end of the list, Miss McCabe pointed out.

The United States Office of Education, it was announced, cannot supply the publications listed in the bulletin other than those expressly designated as publications of the Office of Education. The books, pamphlets and periodicals listed may be obtained ordinarily from their respective publishers, either directly or through a dealer, or, in the case of an association publication, from the secretary of that organization.

Since 1907, the Office of Education (then the Bureau of Education) has annually compiled a list of all current pedagogical literature, Miss McCabe explained. The bibliography embraces not only educational works in the English language but many in foreign languages.

New York City to Spend Large Sum for Books

According to a recent report, the New York City Board of Education has awarded a contract for books, maps and supplies calling for the expenditure of \$4,000,000, the largest sum ever spent on such supplies.

The contract, to run for five years, calls for the expenditure of \$800,000 annually for books, maps, charts, globes and other school material. This five-year contract will save the board \$100,000.



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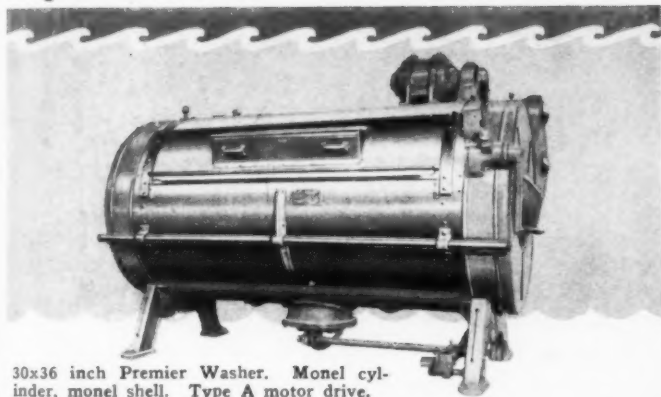
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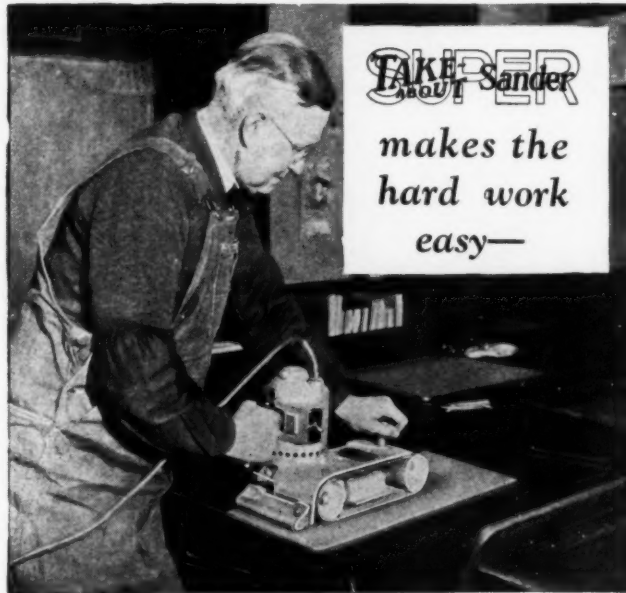
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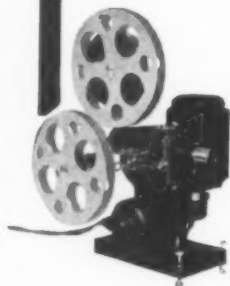
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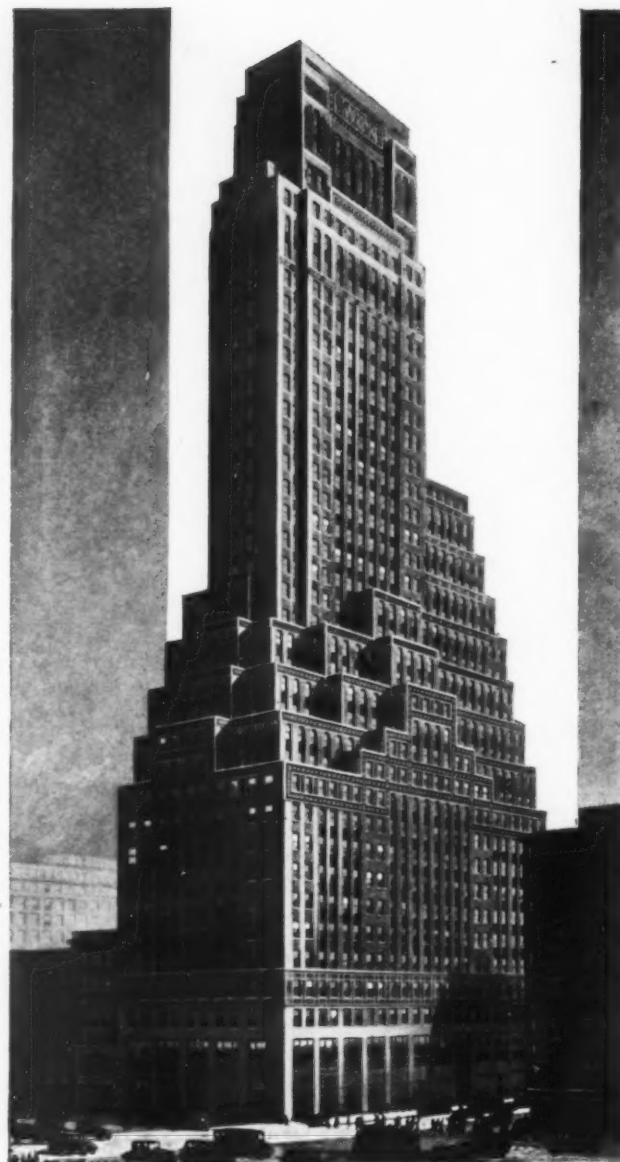
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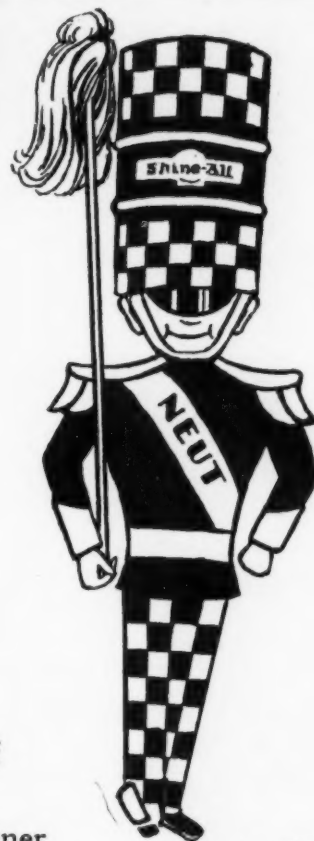
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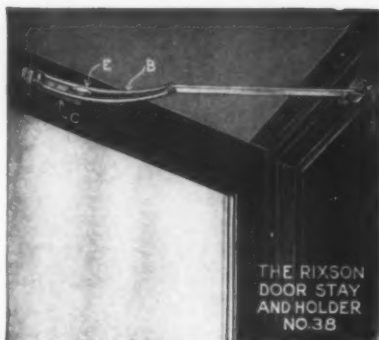


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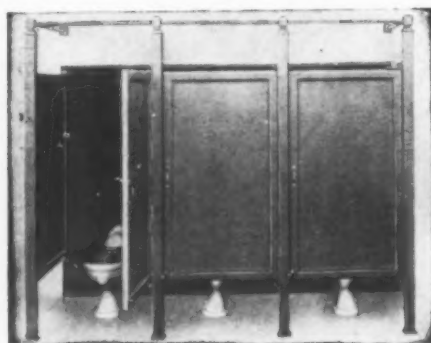
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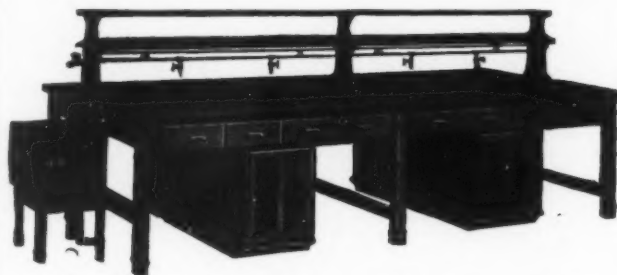
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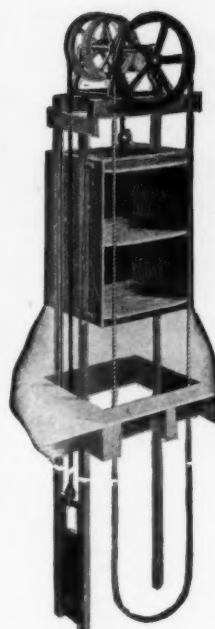
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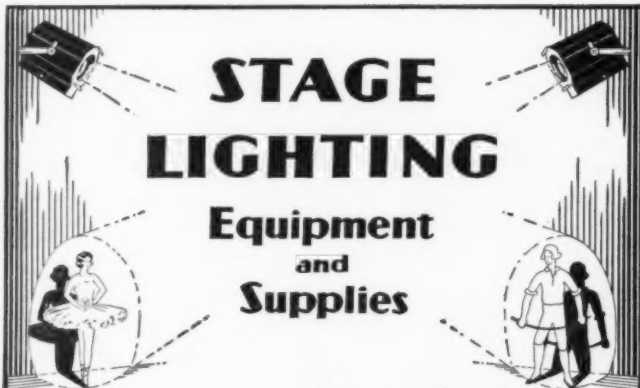
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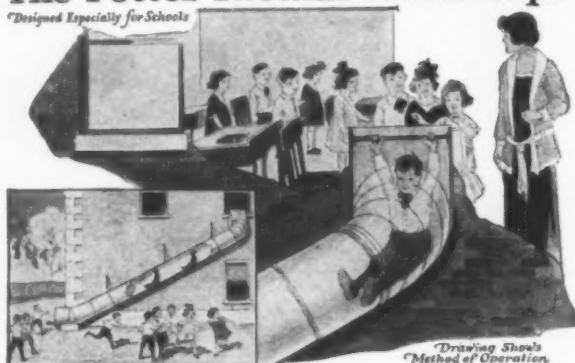
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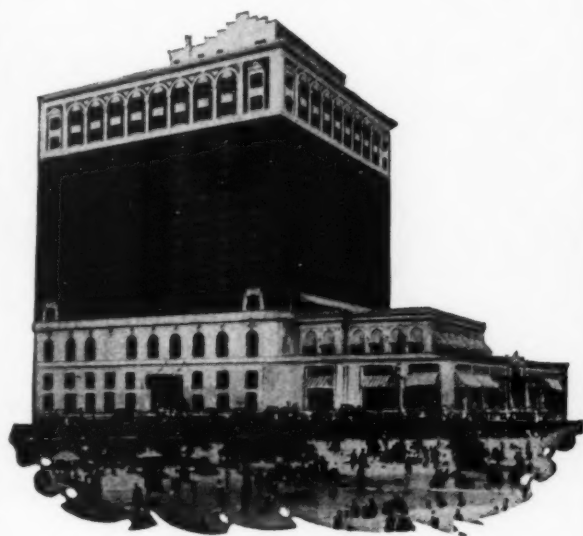
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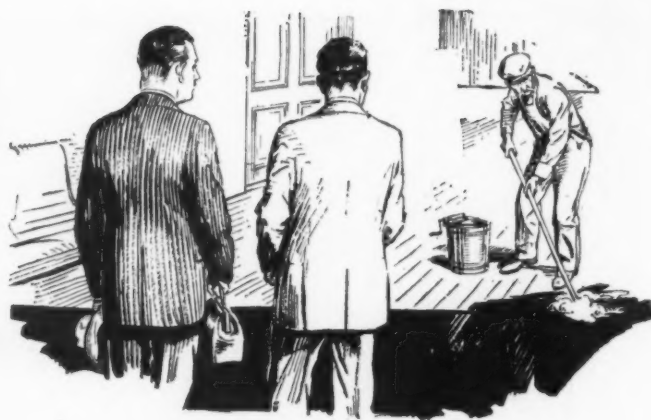
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Albany, N. Y.; Allentown, Pa.; *Atlanta, Ala.; Baltimore, Battle Creek, *Boston, Bridgeport, *Brooklyn, N. Y.; Buffalo, *Camden, N. J.; Charlotte, N. C.; Chattanooga, Tenn.; *Chicago, *Cincinnati, *Cleveland, *Columbus, O.; *Dallas, *Davenport, *Dayton, O.; Decatur, Ill.; *Denver, *Des Moines, *Detroit, Erie, Pa.; Fall River, Mass.; Flint, Mich.; Fresno, Cal.; *Grand Rapids, Mich.; Harrisburg, Pa.; Hartford, *Houston, Texas; *Indianapolis, *Jacksonville, Fla.; *Kansas City, Mo.; *Los Angeles, Louisville, Ky.; Madison, Wis.; *Memphis, Tenn.; *Milwaukee, *Minneapolis, *Moline, Ill.; *Montreal, Newark, N. J.; Newburgh, N. Y.; New Haven, *New York, *Oakland, Cal.; *Oklahoma City, Okla.; *Omaha, Neb.; *Philadelphia, Phoenix, Ariz.; *Pittsburgh, Pleasantville, N. Y.; Portland, Me.; *Portland, Ore.; Poughkeepsie, N. Y.; Providence, Reading, Pa.; Richmond, Va.; *Rochester, N. Y.; Rockford, Ill.; *Rock Island, Sacramento, Cal.; *San Francisco, *Seattle, South Bend, Ind.; Springfield, Mass.; *St. Louis, *St. Paul, Syracuse, N. Y.; *Toledo, *Toronto, Trenton, *Tulsa, Okla.; Utica, N. Y.; *Vancouver, B. C.; Williamsport, Pa.; Worcester, Mass.

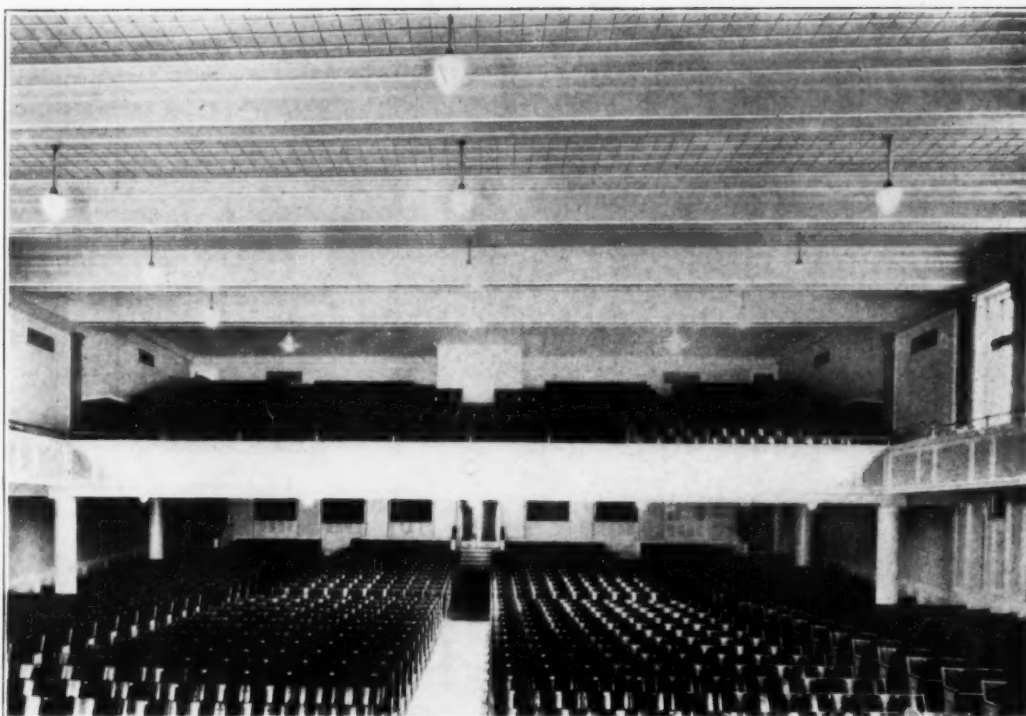
*Stocks of Oakite materials are carried in these cities

OAKITE

TRADE MARK REG. U.S. PAT. OFF.

Industrial Cleaning Materials and Methods

The spacious auditorium of the Madison Avenue School in Rochester, New York, has ceilings of Acousti-Celotex that instantly subdue disturbing sounds and reverberations.



Every syllable clearly understood beneath ceilings of Acousti-Celotex

THE Board of Education in Rochester, New York, knows that *good acoustics* are an absolute necessity if speeches are to be clearly understood . . . if plays are to be enjoyed . . . if musical programs are to be properly heard.

They know how "lingering sounds" or reverberations blur syllables together . . . distort words and notes of music into a jumble of sounds.

So they applied Acousti-Celotex, the sound-absorbing, fibre tile, to the ceilings of this great auditorium of the Madison Avenue School. Now every word, every note travels clear and distinct to the farthest seats.

Acousti-Celotex is used in thousands of school buildings to subdue disturbing sounds . . . to insure *less noise and better hearing* in lecture and recitation rooms . . . to provide perfect quiet in libraries and study halls.

In your own buildings Acousti-Celotex will help you secure a

higher standard of work from your student body . . . help make entertainments and assemblies enjoyable . . . and absorb the disturbing racket in corridors, gymnasiums, cafeterias and manual training shops.

In New or Old Buildings

Acousti-Celotex is quickly and easily installed in either new or old buildings. No remodeling is necessary. For the tiles are fastened directly to existing walls or ceilings.

This remarkable material comes to you in single, finished units, durable and permanent—can be painted and repainted, even using lead and oil paints *without impairing its echo-absorbing efficiency*.

Simply submit your acoustical problems to the acoustical engineers

of The Celotex Company for analysis and recommendation. The reliability of their calculations has been checked and proved in hundreds of actual installations. You will receive their advice promptly and without further obligation.

Mail the coupon below for our new folder, "Better Study Conditions in Schools," with more information about Acousti-Celotex.

THE CELOTEX COMPANY
919 North Michigan Avenue
Chicago, Illinois

In Canada: Alexander Murray & Co., Ltd.,
Montreal

Mills: New Orleans, Louisiana

Branch Sales Offices in many principal cities
(See telephone book for addresses)

Acousti-Celotex is sold and installed by approved Acousti-Celotex contractors

The word
CELOTEX
(Reg. U. S. Pat. Off.)

is the trademark of and indicates
manufacture by
The Celotex Company, Chicago, Ill.

ACOUSTI-CELOTEX

FOR LESS NOISE--BETTER HEARING

THE CELOTEX COMPANY
919 North Michigan Avenue
Chicago, Illinois

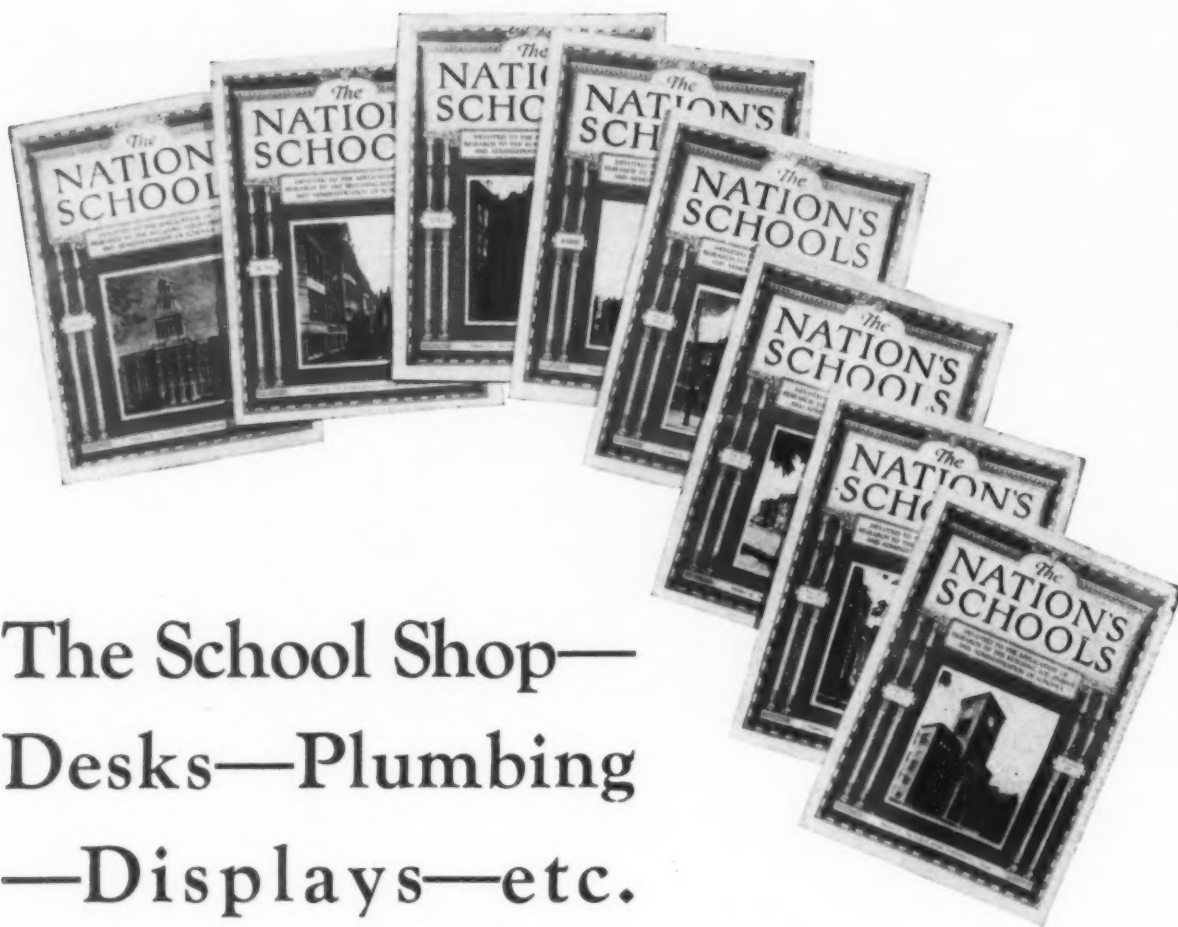
Nat. Schools, 1-30

Gentlemen: Please send me your free folder, "Better Study Conditions in Schools."

Name

Address

City..... State.....



The School Shop— Desks—Plumbing —Displays—etc.

THE monthly visual and mental excursion of the superintendent through his school journal contemplates an alert attention to all pages from beginning to end. In the advertising pages as well as in the text pages there is pertinent information bearing on school problems that confront him daily.

Here are a few excerpts taken from advertisements in this issue of *The NATION'S SCHOOLS*. They deal with the school shop, desks, plumbing, displays. They are excellent exemplification of the service which industry today is rendering to the school field—and voicing through the pages of the school publication.

* * *

"The device that bridges the gap between the academic and the practical—is the shop. And educators find that this is more than a mere bridge. Shop courses serve as an incentive to students. Young boys, fairly overflowing with life and energy, require an outlet that is not afforded by the academic courses. Actual school records show that scholastic standings in academic courses have been raised with the introduction of shop courses."

"The physician thinks of school furniture in terms of growing bones and tissues . . . of precious eyesight that must be guarded. Does the seat support the growing spine and lumbar regions? . . . Does the desk adjust to the proper height so that the body, arms, legs and feet are comfortable? . . . Is the finish in soft colors, soothing to the eyes?"

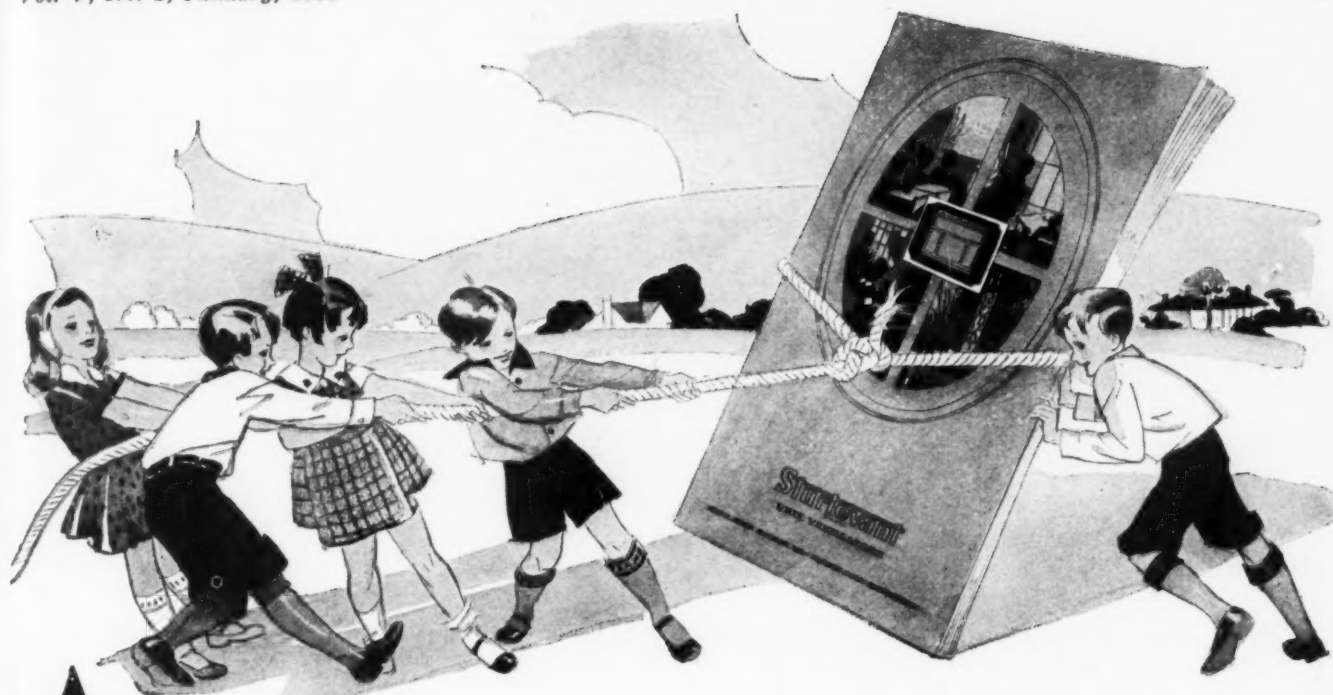
* * *

"Plan as elaborate a washroom as you will—employ the finest sanitary engineer to lay it out—let the best plumbing contractor install it . . . unless your piping materials are thoroughly dependable, your efforts are unavailing. For it is behind the wall and under the floor that the real value of a plumbing installation is determined. Unless the fittings are proof against leaks, unless the valves perform their duties unerringly, sanitation is endangered, maintenance is increased, and an expensive repair job is threatened."

* * *

"Along with modern methods of instruction you find educational institutions adopting equipment that increases teaching efficiency and simplifies the instructor's work. Modern educational programs, for instance, involve the use of quantities of illustrative material. This, in turn, demands adequate means of displaying the material within the narrow confines of the average classroom."

Only those offering approved products or services for schools are invited to use the advertising pages of The NATION'S SCHOOLS



Architects, Trustees, Superintendents Principals — — — should all be familiar with this book!

OF all rooms where the air should be clean and healthful, independent of out-door heat or cold or noise or dust, a *classroom* should come first!

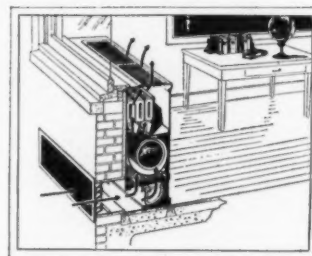
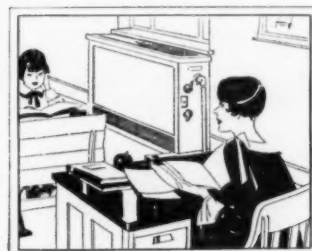
Modern engineering has brought relief and contentment, through Sturtevant Unit Heater-Ventilators, to the occupants of rooms that were once stuffy, overheated or underheated. Classroom air conditions are now made constant and controllable. Air is always changing. Drafts are done away with. Uneven heating is overcome.

Many actual photographs of Unit Heater-Ventilators in schools of different sizes . . . in different localities . . . are found in our Catalog 361. May we mail YOU a copy?

B. F. STURTEVANT COMPANY

Plants and Offices at: Berkeley, Cal. • Camden, N. J. • Framingham, Mass.
Galt, Ontario • Hyde Park, Mass. • Sturtevant, Wis.

Branch Offices at: Atlanta; Boston; Buffalo; Camden; Charlotte; Chicago; Cincinnati; Cleveland; Dallas; Denver; Detroit; Hartford; Indianapolis; Kansas City; Los Angeles; Milwaukee; Minneapolis; Newark; New York; Omaha; Pittsburgh; Portland; Rochester; St. Louis; San Francisco; Seattle; Washington, D. C. • Canadian Offices at: Toronto; Montreal and Galt. Canadian Representative: Kipp Kelly, Ltd., Winnipeg.
Also Agents in Principal Foreign Countries



Sturtevant *the Silent* Unit Heater-Ventilator

Reg. U. S. Pat. Off.

SUPPLIES OUTDOOR AIR ~ FILTERED CLEAN ~ AND TEMPERED

READSBORO MOVABLE DESKS AND CHAIRS Kindergarten Classroom Furniture

Flat or
Sloping
Top



Lifting
or Sta-
tionary
Tops

Also Manufacturers of Folding Seating for
Halls, Auditoriums, Classrooms

READSBORO CHAIR COMPANY
READSBORO, VERMONT

Send for literature

Recently installed in—

Jersey City, N. J. Normal School
Trenton, N. J. High School (3 bldgs.)
Reading, Pa. High School
Granville, Ticonderoga and
Schenectady, N. Y. High Schools
Longmeadow, Mass. High School
Plainville, Conn. High School



Patent Pending
(Meeting all re-
quirements of
latest official
rules.)

NEW MEDART OFFICIAL BASKETBALL GOAL

Another new and improved piece of equipment for the gymnasium. Like other Medart equipment, this new basketball has exclusive features of distinct advantage:

1. The entire goal is a one-piece malleable iron casting.
2. The new construction affords absolute rigidity.
3. The basket rim is rounded.
4. The net is made of No. 48 Hard Laid Seine and is strung from holes drilled in lugs on the underside of the rim.

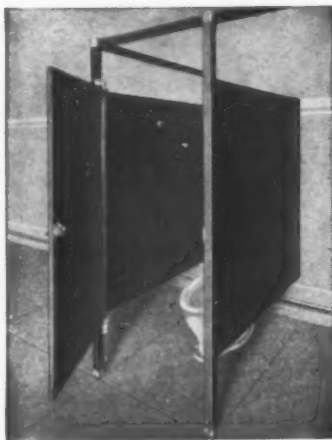
MEDART



Manufacturers Since 1873

Makers of Gymnasium Apparatus,
Playground Equipment, Steel Lockers,
Steel Cabinets and Junior Line for the
Home Playground.

FRED MEDART MFG. CO.
3532 DeKalb Street, St. Louis



Mills Metal New Standard Toilet Partition

New design, new construction, sturdy, will stand years of hard use. The Mills internal shoe prevents moisture accumulations and consequent germ-breeding and corroding opportunities. Thru-bolted hardware of aluminum alloy. An outstanding product. Write for descriptive literature.

THE MILLS COMPANY

A Mills Metal Partition for Every Purpose

904 Wayside Road
CLEVELAND, OHIO

Representatives in All Principal Cities



Your Stage is Safe—when Vallen Equipped!

No fire risk.

No curtain "hitch."

Quality Equipment, built by a responsible manufacturer and really guaranteed, costs slightly more initially, but less eventually.



Vallen Electrical Company, Inc.

AKRON, OHIO, U. S. A.

FIGURE THIS SAVING

FOR YOUR OWN HEATING NEEDS

Dunham Differential Heating Systems save from 25 to 40% of fuel costs, by direct comparisons in change-over installations from ordinary heating systems to those differentially operated. Similar fuel economy is obtained in new buildings.

Apply even the low figure of 25% to your last season's fuel bill, or to this month's bills, and you will see that the plain dollars and cents consideration warrants an investigation of Differential Heating performance.

When you look into the exclusive operating characteristics of Dunham Differential Heating you will find that fuel saving is but part of the story. Maximum comfort and health conditions, unusually important to school executives, are uniformly maintained by Differential Heating.

The simple and effective operating principles based upon the controlled use of hot steam, warm steam, cool steam, as required by outside weather, are exclusive Dunham Differ-

Typical of many is the following statement from a Kansas high school:

"Temperatures are maintained quite closely without constantly regulating the fires. Even though last winter was severe, the Differential System caused a decrease of 37% in fuel consumption."

Another school in Washington states:

"Our Dunham Heating Plant is one of the finest attractions in the new building, and the one that has given us the greatest satisfaction in service and financial savings."

ential features. Automatic control maintains room temperatures without wasteful overheating.

Investigate the operating features that make Dunham Differential Heating so satisfactory in schools throughout the United States and Canada. Write for descriptive bulletins and for facts bearing on your own requirements

» » » »

Look for the name DUNHAM. This nameplate identifies a genuine Dunham Thermostatic Radiator Trap.

The Dunham Differential Vacuum Heating System and individual parts of the apparatus used in that system are fully protected by United States Patents Nos. 1,644,114, 1,706,401 and 1,727,965 and Canadian Patents Nos. 282,193, 282,194, and 282,195. Additional patents in the United States, Canada and foreign countries are now pending.



C. A. DUNHAM CO.

Dunham Building

450 East Ohio Street

Chicago, Illinois

Over 80 branch offices in the United States and Canada bring Dunham Service as close to you as your telephone. Consult your local directory. Dunham engineers are at your service with complete and authoritative data on improved heating to meet your individual requirements.

Many existing heating systems can be converted to Differential operation at moderate cost. These change-overs will pay for themselves. Dunham engineers will survey present systems without obligation.



MODERN SCHOOLS DEMAND THIS SAFE LIQUID SOAP

EAGLE Liquid Toilet Soap is *pure, soothing, quick lathering, highly concentrated and cleansing*. Dispensers are furnished at *cost*. Banish the germ laden bar of soap, which transmits colds and respiratory diseases from one student to another, just as you long ago discarded the roller towel. Adopt the modern Eagle Liquid Soap . . . *it touches no hands but the user's*. Write for samples.

EAGLE SOAP CORPORATION

64 E. Jackson Blvd.

Chicago, Ill.

EAGLE
LIQUID TOILET SOAP

Scenery

Asbestos curtains,
Velour curtains

and

Stage scenery for your
Auditorium stage.

Twenty years of experience in equipping High Schools has placed us in a position to know the particular requirements for your stage.

Write us for further information or request call from our representative.

Twin City Scenic Company

2319 Nicollet Ave.,
Minneapolis, Minn.

2310 Cass Ave.,
Detroit, Mich.

THE NATION'S SCHOOLS today has more full-time school executive subscribers than any other magazine devoted to the problems of school administration. Such leadership is a measure of its service to school people—a service only two years in duration, but which has become outstanding.

The year 1930 will witness the materialization of a yet more intelligent and practical program. More school people who are authorities on the

problems that intimately concern your efforts will be added to the list of contributors. Greater help will be extended to you, now that we have your acceptance and are in a position to claim the foremost place among school administration journals.

The NATION'S SCHOOLS is the school superintendent's magazine. It has an essential place in your profession. And it is devoted exclusively to your own problems.



"ELECTRIC" SCHOOL DUMBWAITERS

Push button control electric motor operated dumbwaiters provide the quickest, safest and most efficient way of handling the school hoist problem.

The "Electric" is safe, silent and costs very little to operate. The "Electric" is manufactured in a number of sizes with any type of push button control.

The "Electric" installed cost is surprisingly low. It is sold installed or F.O.B. factory. It can be installed by local mechanics from the very complete instructions and drawing we supply.

Let us send you our catalogue

DUMBWAITERS *"Electric"* DUMBWAITERS
ELECTRIC DUMBWAITERS INC.
BUFFALO, N. Y.

Mr. S. C. Wetzel

Vice President of the

WAYNE IRON WORKS

makers of

WAYNE SECTIONAL STEEL GRANDSTANDS

will be at the

**N. E. A. CONVENTION EXHIBIT
BOOTH "G" 33**

Mr. Wetzel is a recognized authority on athletic seating—and will be glad to discuss your problems with you. Be sure to see Mr. Wetzel in Atlantic City—February 22 to 27.

Wayne Iron Works

Lincoln Highway and Pembroke Avenue
WAYNE, PA.

FLUSHWOOD (PATENTED)

**The most practical
door for the
School of Today**



MOUNT BARAT CONVENT
Montreal, Canada
Architect, D. J. Spence

AFTER careful comparison and consideration, Flushwood was the unanimous choice of the builders of this up-to-date school.

As all methods in education and instruction have advanced each year, door construction, as embodied in Flushwood, has kept pace. Old type doors would be as out of place as the school equipment of twenty years ago. No modern school building can afford to be anti-

quoted in a single feature, least of all the doors—the most conspicuous and impressive of interior furnishings. Authorities on school construction recognize this fact and that is why they are turning to Flushwood as the answer to their door problem.

Learn more about it. Write for full information and a copy of the attractive Flushwood catalog which has just been completed. The nearest office below will serve you.

MORGAN WOODWORK ORGANIZATION

MORGAN COMPANY
Oshkosh, Wis.; New York City

MORGAN MILLWORK CO.
Baltimore; Jersey City; Greensboro;
Wilmington; New Haven

MORGAN SASH AND DOOR CO.
Chicago Detroit

HOW GOOD - HOW REASONABLE is the Secret of the Greater



Style 50

Regular line reasonably priced according to quality
Send for Samples and Measurement Blanks

D. KLEIN & BRO., INC.

Specialists in School Band Uniforms
715-717-719 ARCH STREET PHILADELPHIA, PA.

Economy in Building
KLEIN'S

All Wool—Waterproofed
School Band Uniforms

All Wool, Fast Color,
Tailored to
Individual Measure

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ANNIVERSARY
SPECIAL

Coat, Trousers and Overseas Cap ...	\$16.75
Cape and Overseas Cap.....	7.00
Cape and Military Cap.....	8.25
Blouse and Overseas Cap.....	7.25
Trousers Only.....	5.50

In any desired color combination

Monograms at slight additional cost.

G R E G G COMMERCIAL EDUCATION SERVICE

Every Gregg book is surrounded by a helpful service at your immediate disposal any time, anywhere.

This service takes the form of teacher's handbooks filled with practical teaching plans;

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Measuring scales, graph charts, and other record forms;

Supplementary laboratory material direct from the business office;

Two professional monthly magazines—**The Gregg Writer** for the student and **The American Shorthand Teacher** for the teacher; keeping your school in constant touch with the latest thought in commercial education.

Over 300 Titles

The Gregg list of publications includes over 300 titles all dealing with some phase of commercial education.

Gregg texts have reached their present commanding position through years of research and investigation made with a view to finding the latest and best in commercial education.

Every Gregg textbook is written on the firing line. Every page is tested in actual classrooms before it appears in print. Every principle set forth has been proved over and over again.

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Rational Typewriting

Rational Bookkeeping and Accounting

Secretarial Studies

General Business Science

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Before selecting a commercial text, write us for a complete catalog of publications, or sample copy of books in which you are interested.

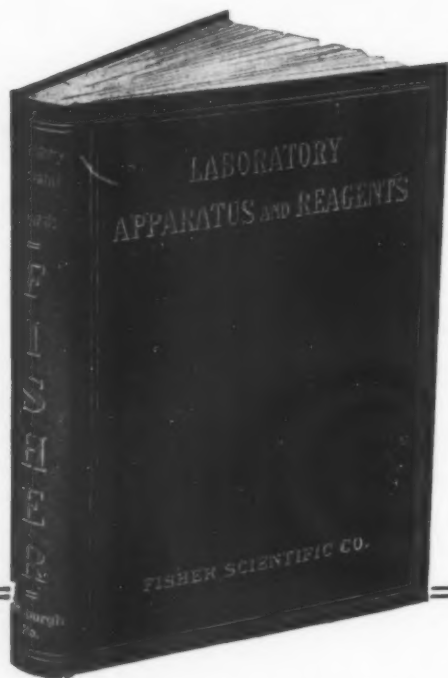
The Gregg Publishing Company

New York

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The Fisher Catalogue lists modern and approved apparatus for Chemistry, Botany and Biology; it is different from any other book of its kind—is written from the laboratory viewpoint—is a source of pertinent information on modern apparatus and technique.

School executives desiring a copy of this catalogue are invited to write for one.

FISHER SCIENTIFIC COMPANY
709-717 FORBES ST., PITTSBURGH, PA.

HYGIENIC COMFORT For Girl Students

Our service installed in girls' rest rooms provides the physical comfort they so urgently require.

Our new improved vending machines are *self-maintaining*—entailing no cost.

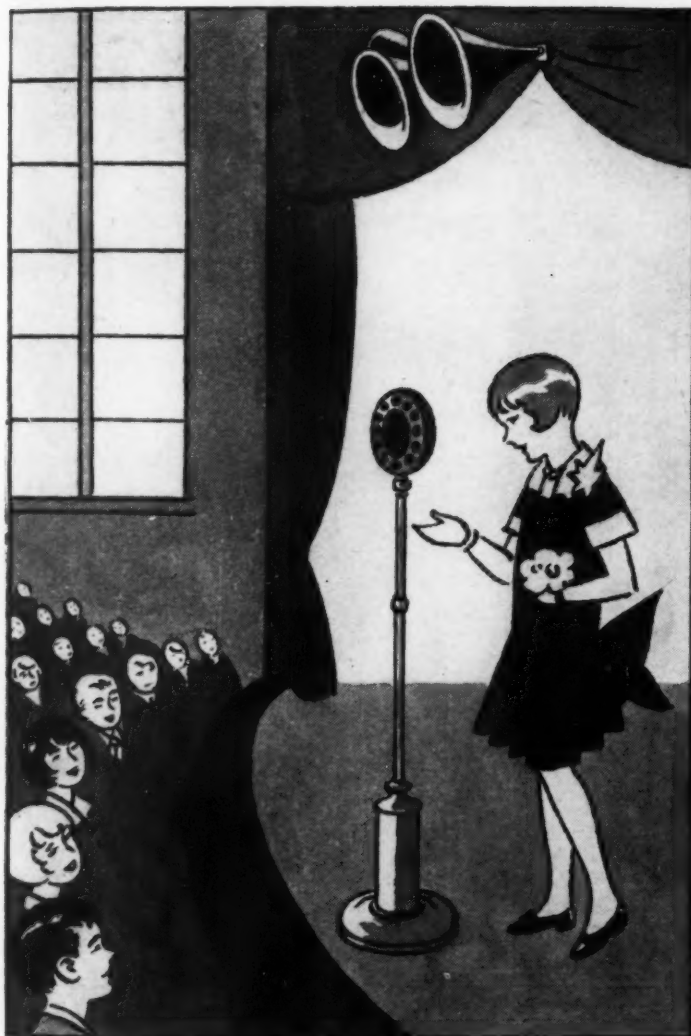
Deans of Women's colleges, superintendents, purchasing agents and maintenance engineers are requested to write for complete details of our **SPECIAL SCHOOL OFFER of DISCOUNTS.**

Mary E. Barton, R.N.

THE HOSPITAL SPECIALTY CO.

Institutional Service Dept.

41 Union Square New York



NOW ALL CAN HEAR THE SMALLEST VOICE

Her tiny voice fills your auditorium when the Western Electric Public Address System is used. This system amplifies sound and distributes it even to the rear seats of the balcony.

It serves one room or many. With a Public Address System, speeches, lectures, general orders, transmitted into your own microphone are broadcast throughout the school, or in just the rooms desired.

The equipment can pick up radio broadcasts, too, bringing history to your class rooms *as it is being made*. It can send through-

out the school the full rich tones of phonograph records played on the Western Electric Music Reproducer, assuring courses in music appreciation, masterful performances timed to fit *your* schedule.

For further information, write to the distributor, Graybar Electric Co., Graybar Bldg., New York, N.Y. Offices in 73 principal cities.



Exercises and folk dances are given new zest with music—via loudspeaker



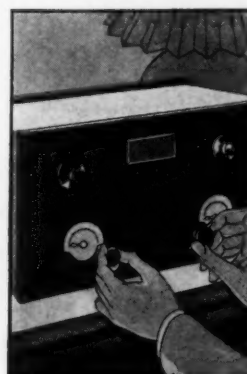
The Music Reproducer plays anything on standard laterally-cut records.



The principal's voice may be heard in 15 (or 150) rooms at once.



—One school architect says "For fire use alone it would more than justify itself."



Music appreciation courses—current events—any radio program can be heard by all.



—and the distinguished visitor "visits" all rooms at once—thanks to Public Address.

Western Electric

PUBLIC ADDRESS AND MUSIC REPRODUCTION SYSTEMS

Distributed by GRAYBAR Electric Company

DRAPER ADJUSTABLE Window Shades

WITH a hygienic perfection that reflects an understanding of schoolroom lighting and ventilation needs, Draper Adjustable Window Shades stand out as the basis of school window shade comparison. Ideal for schoolroom use, because specially selected and processed material makes daylight mellow and soothing, thus preventing all glare and eyestrain. Adjustable—so that ventilation may be controlled.

Built up to a standard—not down to a price—the finest available raw material is used, with excellence of workmanship insured by nearly a quarter century of manufacturing experience. Installed in thousands of America's finest schools, board members prefer the profitable investment Draper shades afford. For illustrated catalog describing the complete Draper line of school shades, address Dept.

LUTHER O. DRAPER SHADE
COMPANY

Spiceland



Indiana



Style V. Double
Roller Shade



No. 2. Adjustable
Roller Shade

ARCHER PORTABLE DENTAL CHAIR

For Schools and Clinics

Can also be used for Nose and Throat work



Write for circular and prices

Sold direct by the manufacturers

ARCHER MANUFACTURING CO., INC.
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Complete Holtzer-Cabot Catalogue appears in Sweet's—pages D-5353-5385.

Holtzer-Cabot SIGNAL SYSTEMS

Established 1875

Telephone Switchboard

This new Holtzer-Cabot Telephone Switchboard is designed particularly for school use. While the service given is identically the same as the standard commercial lamp-type board, there are no lamps to burn out and upkeep expense is negligible.

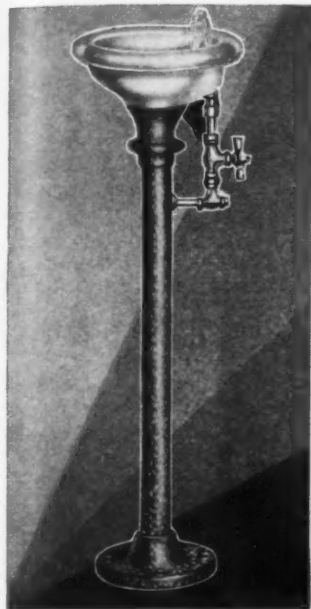
This Switchboard includes a fifty-inch office desk complete, and provides maximum utility at a minimum cost. Complete catalogue sent on request.

The Holtzer-Cabot Electric Co.

EXECUTIVE OFFICE AND FACTORY,
BOSTON, MASS.

CHICAGO	NEW YORK	BALTIMORE
PHILADELPHIA	PITTSBURGH	CLEVELAND
SYRACUSE	DETROIT	MINNEAPOLIS
SAN FRANCISCO	LOS ANGELES	

The Proven Fountain



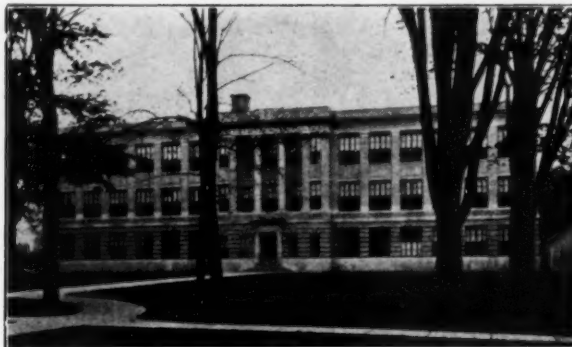
The R-S Drinking Fountain has wide acceptance—it is a proven bubbler. From every angle it is efficient. Besides furnishing clean, refreshing water—each drink is a sanitary one.

Because of its special design it prevents lips from touching the nozzle—contamination is naturally eliminated.

Let us send you illustrated catalog showing the complete line of Rundle-Spence drinking fountains.

RUNDLE-SPENCE MFG. CO.
54 FOURTH ST., MILWAUKEE, WISC.

BROWNE WINDOWS Throughout



*Lowville Academy and Union Free School, Lowville, N. Y.
A. F. Gilbert, Architect*

Demonstrate Superior Qualities. Perfect Ventilation; Maximum Light and Vision; Absolute Weather Protection; Noiseproof when closed; Safety and Economy in cleaning exterior of glass from inside; Easy Operation; Continuous and Lasting Service; No Depreciation; Fuel Saving and Minimum Maintenance Costs.

BUILT OF ROLLED STEEL OR EXTRUDED
ARCHITECTURAL BRONZE

Richey, Browne & Donald, Inc.
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An Applicator Bottle

furnished with our compliments in your own medicine cabinet will soon convince you that

MERCUROCHROME—220 SOLUBLE

(dibrom-oxymercuri-fluorescein)

IS THE

Logical Successor to Tincture of Iodine

FOR

First Aid Prophylactic and General Antiseptic Use

Mercurochrome stains as Iodin does, and it is the stain of Mercurochrome, as it is of Iodin, that shows just where and how effectively the germicide has been applied; it fixes the bactericidal agent in the field for a relatively permanent period which prolongs the asepsis or the sterilizing effect, and it provides for demonstrable penetration into the tissues beneath the superficial surfaces. Inasmuch as Mercurochrome is definitely proved an extremely efficient general antiseptic, it is only reasonable to consider it the successor to Iodin in this field, as it is free from the objectionable features of Iodin, for

MERCUROCHROME DOES NOT IRRITATE, BURN OR INJURE TISSUE

SELL YOURSELVES FIRST

**HYNISON, WESTCOTT
& DUNNING**
BALTIMORE, MD.

HYNISON, WESTCOTT & DUNNING,
DEPT. N, BALTIMORE, MD.

*Please send me Mercurochrome Applicator Bottle for
personal use.*

Name

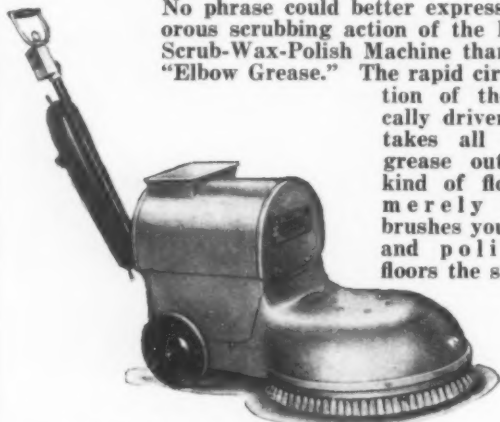
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Electric "Elbow Grease"

"Elbow Grease" is slang for ENERGY expended.

No phrase could better express the vigorous scrubbing action of the LAWLOR Scrub-Wax-Polish Machine than Electric "Elbow Grease."

The rapid circular motion of the electrically driven brushes takes all dirt and grease out of any kind of floors. By merely changing brushes you can wax and polish your floors the same way.



The LAWLOR Scrub-Wax-Polish Machine will clean your floors more quickly, more quietly, more CHEAPLY. A better job at a greatly reduced cost! What more can you ask?

LAWLOR Scrub-Wax-Polish Machines are made in four sizes. A model for every floor area—at a price you can afford to pay.

Our Floor Maintenance Engineer Will Give You a Demonstration—and Solve Your Floor Maintenance Problems. Write and Full Information and Literature Will Be Given You.

S. C. LAWLOR CO., Inc.

Owned and operated by Peter Boller Machine Works
CHICAGO 132 North Curtis Street ILLINOIS



UNIVERSAL SWING-WING DISPLAYORS

for drawings, diagrams, graphs, charts, maps, and illustrations of every type.

TO SEE as well as to hear what is being taught — is today's trend in education. Swing-Wing Displayors, the modern aid to visual instruction, help to "drive home" important facts in every course of study.

Let us tell you how hundreds of schools and colleges throughout the country are using Swing-Wing Displayors in classrooms, laboratories, lecture halls and workshops.

UNIVERSAL FIXTURE CORP.
135 West 23rd St., New York City

"INTER-TWILL" Window Shades for SCHOOLS

Fulfill all requirements

Specify—"INTER-TWILL" because . . . there are more years of service in these window shades. It is a TWILL woven fabric of exceptional strength. "Inter-twill" shades are washable.

If total exclusion of light is desired, specify Interstate "NOLITE" Shade Cloth. Shadowless and light-proof in all colors including light colors and white.

Made in the color tone of your choosing

Interstate Shade Cloth Co.
HOBOKEN and NEW JERSEY

The Lapsley-Interstate Shade Cloth Co.,
Baltimore Maryland

Barriers of Safety

Stewart Iron and Wire Fences for school enclosures are exceptionally strong and rugged.

They afford the utmost in protection and durability.

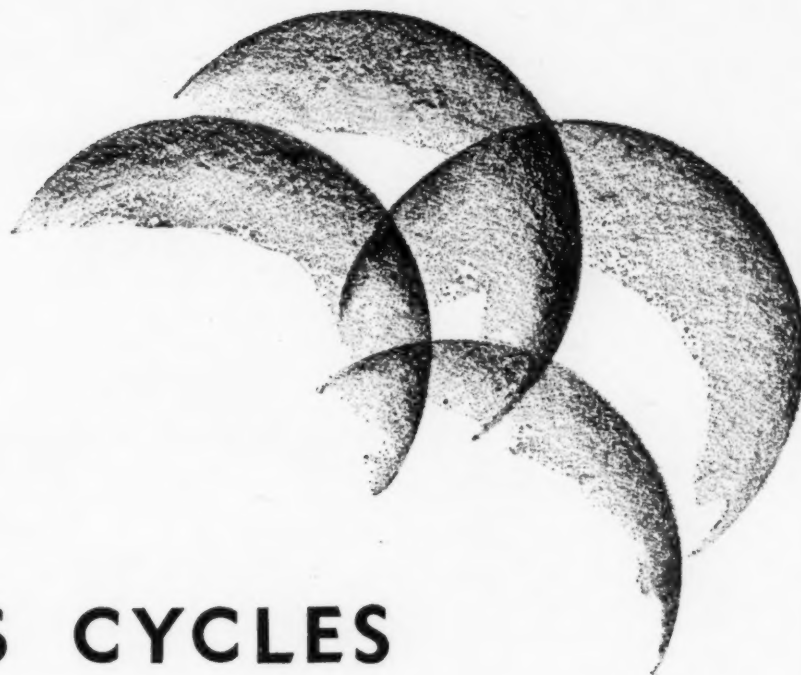
Write for Catalog.

**THE STEWART IRON
WORKS CO., INC.**

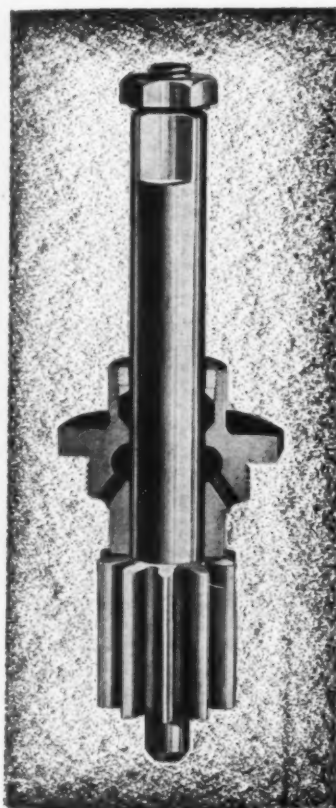
616 Stewart Block
Cincinnati, Ohio

Representatives
in principal cities.





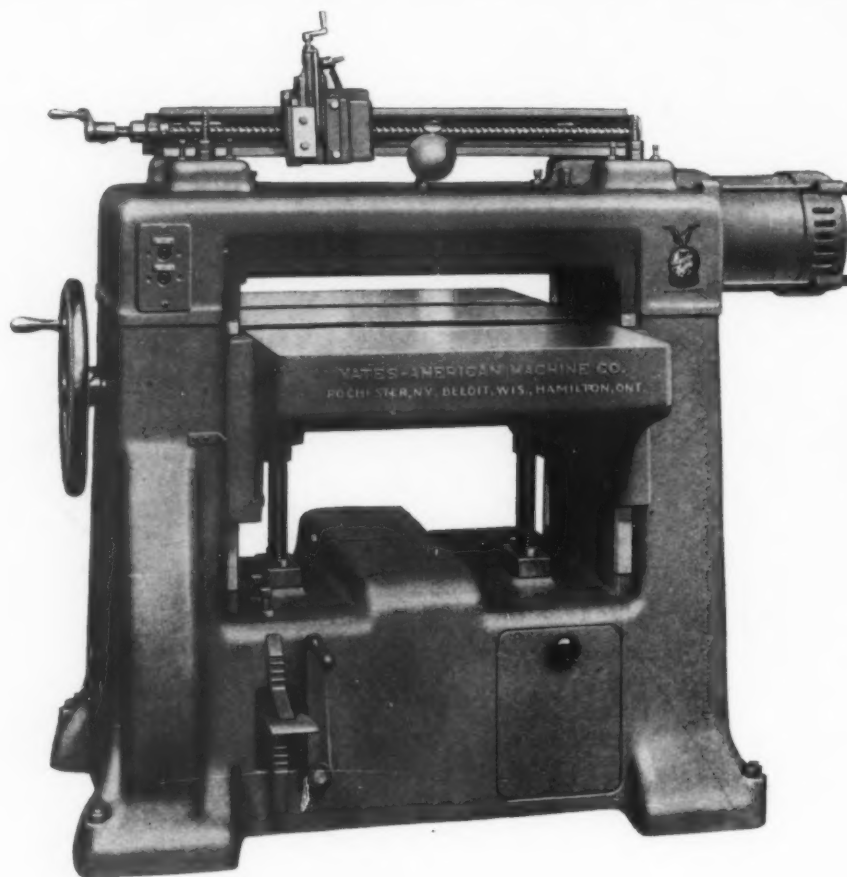
CEASELESS CYCLES



An increase of 15% in bearing space results in an increase of 25% in the life of the 1930 NORTON DOOR CLOSER. And the NORTON has long been famed as the most durable door closer made! ▲ ▲ This increase in bearing space is not the only feature which makes the NORTON long-lived. An ingenious packing nut, developed in our own research laboratories, absolutely eliminates any possibility of leakage. And a new spring, of specially tempered steel, is far stronger and more resilient—doing its share toward achieving the NORTON ideal . . . ceaseless cycles of completely trouble-free service ▲ ▲ NORTON has achieved that ideal. The largest individual manufacturer of door closers in the world, theirs is a specialized product. Architects everywhere specify NORTON for continuously perfect door closer comfort.

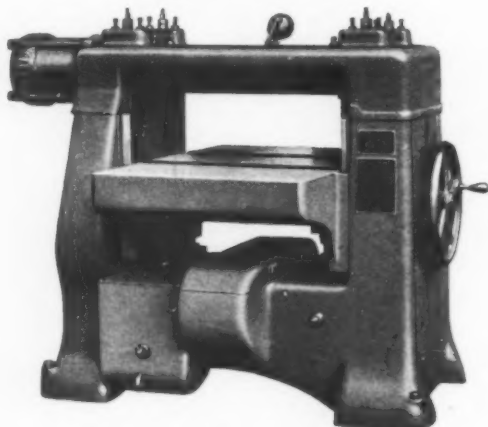
NORTON DOOR CLOSER COMPANY
Division of The Yale & Towne Mfg. Co.
2900 NORTH WESTERN AVENUE, CHICAGO, ILLINOIS

NORTON DOOR CLOSERS



A School Surfacers of Unequalled Quality

B-4 Single Surfacers



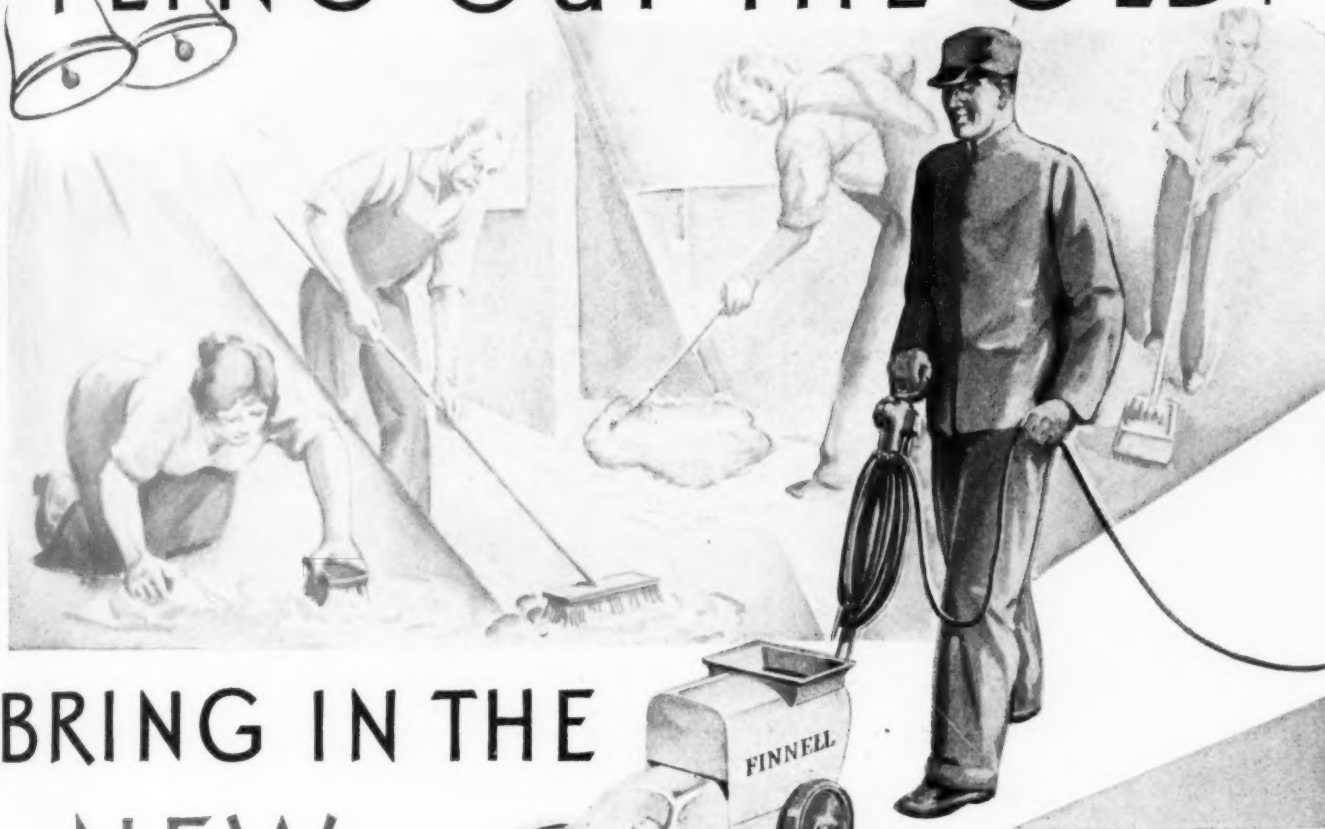
The view at the top of the page shows the front of the B-4 and here is shown the rear of the machine. The clean-cut, compact and sturdy construction of the B-4 is readily apparent. Built in 24"x8" size only.

UNEQUALLED because in no other make single surfacer for school use is there the staunch, rugged and durable construction, together with positive safety and operation features as is found in the B-4. Note in the illustrations of the B-4 here the rigid one-piece construction and also the fact that every operating part is fully enclosed. Note the direct motor drive and the convenience of the push button control. These and many other features along with B-4's moderate cost are influencing more and more school executives and woodworking instructors to install this machine in their school shops.

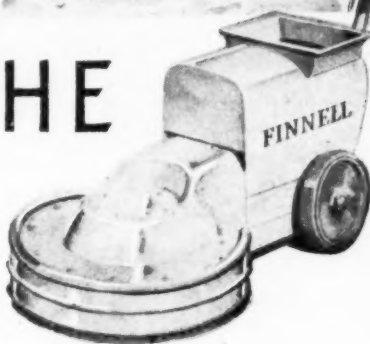
Write for the new Yates-American school catalog which will be ready for distribution about the first of the year and which will describe and illustrate the complete Yates-American line of school woodworking machinery.

Yates-American Machine Company
Vocational Division
BELLOIT, WIS.

FLING OUT THE OLD!



BRING IN THE NEW...



Fling out the old! Bring in the new!

Fling out the old fashioned mops and scrubbing brushes!

Bring in the FINNELL Electric Scrubber-Polisher!

Fling out the danger of dirty floors!

Bring in the luster of floors scientifically cleaned and polished!

Fling out the tendency of pupils to be careless because of slovenly surroundings!

Bring in the morale of a trim, clean-cut staff and student body imbued with pride in their surroundings!

Fling out the complacency that is satisfied to trail along "just anywhere"!

Bring in the ambition that is alive to the signs of the times and adopts tested procedures in the spirit of progressiveness.

Fling out the old! Bring in the new!

Let your floor cleaning methods keep pace with your teaching methods. Employ only the newest and best. Use the FINNELL electric way—the FINNELL SYSTEM of electric scrubbing, waxing and polishing. In class

rooms, corridors, assembly rooms, lavatories—everywhere in the school building—the FINNELL ELECTRIC Floor Machine cleans, beautifies and preserves floors. It divides operation costs in half, multiplies savings, subtracts from the custodian's worry over routine details, and adds generally to the attractiveness of your buildings.

The FINNELL SYSTEM is a complete system—not just a machine. There are eight different models of the FINNELL Scrubber-Polisher—one to suit your needs exactly. The size of your building, the floor area, the floor type—all have a bearing on the size you should use. FINNELL is the one system giving you so wide a range.

One school superintendent writes: "We are using three complete sets of FINNELL Equipment in our school buildings. They are indispensable for scrubbing and waxing corridors, class rooms and gymnasiums. They work perfectly under even the smallest desks and in other congested areas. The machines are equally effective in cleaning our wood, cement, terrazzo and composition floors."

Now available in the FINNELL system is the *Electric Vacuum Mopper*, which picks up the dirty water from the floor, then rinses the

floor with clean water, picking it up immediately, and leaving the floor dry as well as clean.

Investigate Now!

A FINNELL representative will be glad to make a survey of your floor space and recommend which of the eight FINNELL models would best serve your needs. Feel free to call him in—it will cost you nothing whatever and put you under no obligation. Address FINNELL SYSTEM, INC., 1501 East Street, Elkhart, Indiana, and Hannibal, Missouri.

THE FINNELL SYSTEM

will be on exhibit in

National Education Association Department of Superintendence Convention

BOOTH D-40

CONVENTION HALL

Atlantic City—Feb. 22-27

You are cordially invited to call and inspect the various sizes and models.

*It waxes—
It polishes*

FINNELL

*It sands—
It scrubs*

ELECTRIC FLOOR SCRUBBER-POLISHER

Behind the wall lies real economy

Plan as elaborate a washroom as you will—employ the finest sanitary engineer to lay it out—let the best plumbing contractor install it . . . unless your piping materials are thoroughly dependable, your efforts are unavailing.

For it is behind the wall and under the floor that the real value of a plumbing installation is determined. Unless the fittings are proof against leaks, unless the valves perform their duties unerringly, sanitation is endangered, maintenance is increased, and an expensive repair job is threatened.

Realizing this, Crane Co. has built its complete line of plumbing materials



To the inviting appearance and mechanical perfection of this Ipswich lavatory, C598-88, the certainty of dependable operation is added when it is installed with Crane piping materials.

logically. Starting with valves and fittings 75 years ago, it perfected them to a point where they were absolutely dependable before it placed any fixtures on the market.

The wisdom of this policy has been proved by the experience of thousands of schools the world over, who have kept costs down, and efficiency up by seeing to it that their piping materials as well as fixtures were of Crane quality.

Valves



CRANE



Fittings

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